

2016

# Self-Evaluative Salience and Motivational Salience as Predictors of Depressive Affect and Appearance Based Rejection Sensitivity.

Mandana Toosi  
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# Walden University

College of Social and Behavioral Sciences

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Mandana Toosi

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Walden University

2016

Abstract

Self-Evaluative Salience and Motivational Salience as Predictors of Depressive Affect  
and Appearance-Based Rejection Sensitivity

by

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MA, The Chicago School of Professional Psychology, 2007

BA, Eastern Illinois University, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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## Abstract

Although the psychological effects of appearance schemas have been studied in the general population, we know little about the relation of these schemas to appearance-based rejection sensitivity. This study examined the relations among predictive variables of appearance-invested self-schemas (self-evaluative salience [SES] and motivational salience [MS]), appearance-based rejection sensitivity, and depressive affect. Self-discrepancy theory was used to theorize that when individuals experience discrepancies with self, conflict arises in self-schemas, and that this conflict relates to an increase in depressive affect and appearance-based rejection sensitivity. The sample consisted of 131 adult female college students participating in a continuing education program. Multiple regression was used to evaluate the relation between appearance-invested self-schema and depressive affect. A second multiple regression equation was conducted to evaluate the relation between appearance-invested self-schema and appearance-based rejection sensitivity. Participants with higher SES scores had significantly higher depressive affect scores and appearance-based rejection sensitivity scores. Participants with higher MS scores had significantly lower depressive affect and appearance-based rejection sensitivity scores. High SES significantly predicted more depression and sensitivity to rejection based on appearance, and high MS appeared to be a protective factor against depression and appearance based rejection. The results of the study promote positive social change by helping professionals improve treatments for individuals suffering from negative appearance-invested self-schemas, rejection sensitivity, and depression.

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## Introduction

Western societies emphasize the importance of physical attractiveness (Calogero, Herzbozo, & Thompson, 2009). Individuals who are perceived as physically attractive often experience significant advantages in terms of social and employment opportunities, friendships, and romantic relationships (Bartky, 2003; Hosoda, Stone-Romero, & Coats, 2003). On the contrary, individuals perceived as unattractive are often the victims of ridicule, teasing, and discrimination—the results of which can be heightened sensitivities to appearance-based rejection (Calogero et al., 2009). This increased sensitivity can have a significantly negative impact and lead to distressing concerns, as addressed below (Park, DiRaddo, & Calogero, 2009; Park, 2007).

A certain degree of dissatisfaction with one's physical appearance on occasion is normal, but concerns that interfere with daily activities may be an indication of *appearance-based rejection sensitivity* (Park, Calogero, Young, & Diraddo, 2010). Downey and Feldman (1996) conceptualized this cognitive-affective processing disposition to help explain why some individuals experience maladaptive reactions to rejection. According to Park et al. (2010), appearance-based rejection sensitivity consists of affective and cognitive components that interact to amplify rejection-based fears. This interaction means that individuals who deal with prolonged or severe rejection may develop sensitivities to appearance-based rejection (Downey & Feldman, 1996). Individuals with high levels of appearance-based rejection sensitivity are more likely to expect rejection based on their appearance. Such individuals are also at elevated risk for

body image disturbances, such as body dysmorphic disorder (BDD; Leary, Twenge, & Quinlivan, 2006).

Depression is another disturbance linked to appearance-based rejection sensitivity (Chango, McElhaney, Allen, Schad, & Marston, 2012; Liu et al., 2014; Pearson, Watkins, & Mullan, 2010). Major depression, one of the most severe forms of depression, is an Axis I diagnosis that may include the following symptoms: depressed mood, loss of interest in pleasure, insomnia, appetite or weight changes, low energy, poor concentration, feelings of worthlessness, and suicidal thoughts (American Psychiatric Association, 2013). A diagnosis of major depression requires the presence of a depressed mood or the loss of interest or pleasure, which must be present most of the day for a minimum of 2 consecutive weeks (American Psychiatric Association, 2013).

Researchers have substantiated the relation between appearance-based rejection sensitivity and depression (Chango et al., 2012; Liu et al., 2014; Pearson et al., 2010), but the possible correlations between self-schema and depressive affect have not been explored. Self-schemas are the cognitive structures in which an individual organizes information about the self (Rosenfield, Lennon, & White, 2005). While there are many types of self-schema, motivational salience and self-evaluative salience are two important types related to appearance-based rejection. The current study involved an exploration of the relation between these two schema, depressive affect and appearance-based rejection sensitivity. Gaining a better understanding of the ways motivational salience and self-evaluative salience impact depressive affect and appearance-based rejection sensitivity

may help clinicians develop more effective interventions for patients suffering from related emotional disturbances.

This introductory chapter begins with the background of the research topic. The purpose of the study, research questions, hypotheses, theoretical basis, definition of terms, assumptions, limitations, and the extent of self-schema that were investigated are then presented. The chapter closes with a brief summary.

#### Background of the Problem

##### Self-Schema

Self-schema are the cognitive structures formed by personal and social experiences that an individual uses to organize information about the self (Rosenfield et al., 2005). Self-schema are formed by early experiences and can be positive or negative (Ledoux, Winteroud, Richardson, & Clark, 2010). Two important types of appearance-based self-schema include self-evaluative salience (SES) and motivational salience (MS). Self-evaluative salience is the degree to which one bases his or her perceived social worth and sense of self on physical appearance (Ledoux et al., 2010). For example, individuals with high SES may overemphasize the importance of their physical appearance when self-assessing personal and social worth (Cash, Melnyk, & Hrabosky, 2004). High SES is linked to greater levels of dysfunctional and maladaptive behavior than high MS (Cash et al., 2004). Individuals with high SES may internalize media portrayals of the *thin ideal*, which can exacerbate body image disturbances and negatively affect psychosocial function (Cash et al., 2004). MS differs from SES in that it refers to the degree to which individuals attend to and manage their appearances (Ledoux, et al., 2010). MS is

measured by the significance an individual places on enhancing his or her appearance through grooming behaviors (Cash et al., 2004).

Many differences between MS and SES exist, although conceptual similarities can make distinction problematic. SES refers to the role that appearance has on self-worth, while MS refers to the importance of looking attractive (Jakatdar et al., 2006). SES is more strongly related to pathological disorders than MS (Ledoux et al., 2010). Unlike SES, MS is not related to an individual's quality of life, avoidant coping skills, or self-esteem (Cash et al., 2004; Jakatdar, et al., 2006; Rudiger et al., 2007). Body image dissatisfaction is often found in individuals who are greatly invested in their appearances. Body image dissatisfaction describes the discrepancy between an individual's *ideal self* and his or her perception of *actual self* (Partridge & Robertson, 2011).

#### Depression and Depressive Affect

Negative body schema are closely associated with depressive affect, which can reduce quality of life, even at low levels. Affect refers to the way an individual experiences feelings and emotions, which plays a role in the cognitive and affective components of appearance-based rejection sensitivity. These affective components are related to anxiety over physical appearance, while the cognitive components describe expectations of rejection (Park et al., 2010). Thus, an individual who fears that he or she will be rejected based on physical appearance may experience anxiety or depression.

At high levels, negative body schemas are important predictors of functional disability, morbidity, and mortality (Donohue & Pincus, 2007; Sobocki et al., 2006). The treatments and health-related consequences of depression cost Americans at least \$83 billion a year (Donohue & Pincus 2007; Sobocki et al., 2006).

#### Research Problem

Although the psychological effects of physical appearance have been studied among the general population, relatively few studies have been conducted on the relation between appearance-based self-schemas and depressive affect. Even less is known about self-schemas and appearance-based rejection sensitivity. This research study explored the relation between self-evaluative salience, motivational salience, appearance-based rejection sensitivity, and depressive affect. The view of self is externally (socially) and internally constructed, which means that individuals are susceptible to creating distorted, negative views of themselves. Self-discrepancy theory suggests that when there is a discrepancy between the idealized and actual self, one will engage in motivating or self-evaluative behaviors. The latter view can result in reductions to perceived social worth, depressive affect, and appearance-based rejection sensitivity. A better understanding of these relations may help professionals develop more effective interventions for individuals suffering from depressive affect or appearance-based rejection sensitivities related to self-schema. If high self-evaluative salience is associated with depressive affect and appearance-based rejection sensitivity, clinicians can help individuals reduce negative self-schemas.

There is a dearth of literature on the relation between appearance-invested self-schema, appearance-based rejection sensitivity, and depression. This study explored the how the predictors of SES and MS were related to depressive affect and appearance-based rejection sensitivity.



#### Purpose of the Study

Multiple cognitive and affective factors influence the development of appearance-invested self-schema, depressive affect, and appearance-based rejection sensitivity. The purpose of this quantitative survey study was to investigate SES and MS among a population of female college students using two multiple regression analyses. The first analysis evaluated the relations between the independent variables of appearance-invested self-schemas (SES and MS) and the dependent variable of depressive affect. A second multiple regression was used to evaluate the relations between independent variables of appearance-invested self-schemas (SES and MS) and the dependent variable of appearance-based rejection sensitivity.

#### Research Questions and Hypotheses

RQ1. What is the relation between appearance-invested self-schema and depressive affect?

*H*<sub>10</sub>. There is no significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R; Jakatdar, Cash, & Eagle, 2006) and depressive affect as measured by the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) in a sample of college student women.

*H*<sub>1A</sub>. There is a significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar et al., 2006) and depressive affect as measured by the Center for Epidemiologic Studies

Depression Scale (CES-D: Radloff, 1977) in a sample of college student women.

RQ2. What is the relation between appearance-invested self-schema and appearance based rejection sensitivity?

*H2<sub>0</sub>*. There is no significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar et al., 2006) and appearance based rejection sensitivity as measured by the Appearance Based Rejection Sensitivity Scale Short Format (Appearance-RS: Park, 2013) in a sample of college student women.

*H2<sub>A</sub>*. There is a significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar et al., 2006) and appearance based rejection sensitivity as measured by the Appearance Based Rejection Sensitivity Scale Short Format (Appearance-RS: Park, 2013) in a sample of college student women.

#### Theoretical Framework

Self-discrepancy theory (Higgins, 1987) served as the foundation for understanding appearance-based rejection sensitivity, self-schema, and depression. Self-discrepancy theory is based on the idea that discrepancies between representations of the self are related to emotional vulnerabilities, such as sadness and agitation (Matthews & Lynn, 2008). These discrepancies can cause cognitive imbalances that are associated with distinct emotional reactions such as guilt, anxiety, and failure. Higgins (1987) based these

self-discrepancies on two separate cognitive distinctions: domains of the self (actual, ideal, and ought), and standpoints of the self (self and other). Self-discrepancy theory suggests that both depression and body dissatisfaction arise when a discrepancy between the ideal self and the actual self occurs, causing an individual some level of vulnerability or anxiety (Forston & Stanton, 1992; Higgins, 1987). This discrepancy can be perceived as failure and may affect self-perception and self-worth in a way that leads to further emotional deterioration, depression, and suicidal tendencies. When individuals experience vulnerability or anxiety, they may develop appearance-based rejection-sensitivity. This is further discussed in Chapter 2.

#### Nature of the Study

A quantitative method was chosen for this study because the goal of the research was to investigate the statistically significant effects of quantifiable concepts (Howard, 2010). A quantitative method was ideal because it permitted an examination of the relations between variables (Pagano, 2009). This method allowed me to conduct multiple linear regression analyses to determine the relationships between SES, MS, depressive affect, and appearance-based rejection sensitivity.

The independent variables were SES and MS, as measured by the Appearance Schemas Inventory Revised edition (ASI-R). Depressive affect and appearance-based rejection sensitivity served as the dependent variables, and were measured by the CES-D and Appearance-RS, respectively. Two multiple regressions were performed; the first evaluated the relation between appearance-invested self-schemas (SES and MS) and depressive affect. The second evaluated the relation between appearance-invested self-schema and appearance-based rejection sensitivity.

#### Definitions of Terms

*Appearance-based rejection sensitivity.* The degree to which an individual anticipates rejection due to their physical appearance, thus provoking some degree of anxiety (Park et al., 2009).

*Appearance-invested self-schemas.* A cognitive structure that systematizes and determines the processing of appearance-related information that is pertinent to the self (Cash & Labarge, 1996). There are two types of appearance schemas; self-evaluative salience and motivational salience (Cash, Melnyk, et al., 2004).

*Motivational salience.* The extent to which individuals attend to their appearances through appearance managing behaviors (Jakatdar, Cash, & Engle, 2006).

*Schema.* A pattern of thoughts or behaviors developed by pre-conceived ideas that represent some aspect of the world and self (Swann & Pelham, 2002).

*Self-evaluative salience.* The extent to which individuals define themselves and their self-worth based on their physical appearance, which they consider significantly valuable to their social and emotional experiences (Jakatdar, Cash, & Engle, 2006).

#### Assumptions

There were a few assumptions inherent to this study. I assumed that all instruments employed during the research, including the CES, ASI-R, and Appearance-RS, were valid instruments capable of measuring the relationships in question. A second assumption was that participants answered questions truthfully and responded positively to requests for information. It was also assumed that only participants who met the study's inclusion criteria were included in this research. Given the population sample, I

assumed they had sufficient reading comprehension skills to comprehend the survey items.

#### Scope and Delimitations

The scope of this study was limited to one university in Central Illinois. The sample population included only participants from that university who were in the continuing education program. There was no restrained time frame.

There were several delimiting factors as well. First, the chosen population consisted of adult, female college students participating in a continuing education program. This population was chosen because research indicated that women are more prone to depression and appearance-based rejection sensitivity than men (Morgan et al., 2012). By selecting a population more likely to be confronted with these issues, there was a stronger chance that any potential relationships between self-schema, depressive affect, and appearance-based rejection sensitivity would be detected. The chosen methodology was also a delimiting factor. Because the aim of this study was to uncover relations between variables, quantitative methodology was chosen over qualitative. A quantitative correlational design was chosen over other quantitative methodologies because it allowed me to conduct multiple linear regression analyses to examine relationships between study variables. Finally, while there were other compatible theories for examining existing research and evaluating study results, self-discrepancy was most aligned with the independent and dependent variables of the study.

#### Limitations

A few limitations of the study must also be addressed. One limitation was that participants may not have answered all the questions truthfully or responded positively to

requests for information. The use of a convenience sample also limited the study because there was no way to confirm if groups were representative of the population they came from. Another limitation was the use of a regression design, which made it impossible to prove causation. Although relationships may indicate a connection between two variables, they do not prove causation. If two variables are associated with each other, predictions can be made about one of those variables, using the value of the other (Gravatter & Wallnau, 2007).

#### Significance of the Study

Self-schema are used to develop a sense of self in relation to the world. Negative self-schema can greatly decrease quality of life. Depression and appearance-based rejection sensitivity are some consequences of negative self-schemas (Park et al., 2009; Park, 2007). It is important to understand the relationships between appearance-invested self-schemas, depressive affect, and appearance-based rejection sensitivity in order to address their destructive effects, such as suicide, eating disorders, impaired self-image, and sexual dysfunction. Understanding this relationship may help clinicians promote more comprehensive therapeutic approaches to treating dysfunctional levels of SES. This information may also benefit nonclinicians by providing greater insight into schematic processes and their link to depressive affect and appearance-based rejection sensitivity. If individuals' appearance-invested self-schema are assessed and taken into consideration, clinicians can incorporate targeted treatment techniques that address self-image. Currently, little research exists on the relation between appearance-invested self-schema and appearance-based rejection sensitivity (Calogero et al., 2009; Leary et al., 2006).

Finally, the results of the study may promote positive social change by helping individuals and clinicians incorporate healthier, in-depth, communal outlooks on self-image and treatments for self-image discrepancies. This study may contribute to discourse and create a foundation to expand research on self-image, self-schema, depressive symptoms, and appearance-based sensitivities by providing insight into relationships between these factors.

#### Summary

Individuals with heightened sensitivities to appearance-based rejection may experience depressive symptoms that lead to more serious manifestations, such as suicide attempts, sexual dysfunction, and interpersonal difficulties. This study used two multiple regressions to evaluate the relationships between the independent variables (SES and MS) and the two dependent variables (depressive affect and appearance-based rejection sensitivity). I investigated the size and direction of these relationships, as well as theoretical conceptualizations to support them.

Chapter 2 provides a comprehensive review of literature on appearance-invested self-schema, depressive affect, and appearance-based rejection sensitivity. In addition, self-determination in relation to appearance-invested self-schema, depressive affect, and appearance-based rejection sensitivity are reviewed. In Chapter 3, the methodology, research design, data collection, and analysis procedures are described. The methodology chapter also includes a restatement of the research questions and hypotheses, a description of the sample and sample selection, and a discussion of the variables, data analysis, data collection, and ethical considerations. The results are presented in Chapter

4 and interpreted in Chapter 5 as well as a synthesis and interpretation of these findings with the extant literature, and discussion regarding potential for future study.



## Chapter 2: Review of the Literature

### Introduction

This literature review establishes the need for research on the relationships between depressive affect, appearance-based rejection sensitivity, self-evaluative salience, and motivational salience. Many theoretical frameworks were used to explain the phenomenon of appearance-invested self-schemas depressive affect, and appearance-based rejection sensitivity. This chapter includes a review of previous research on factors associated with appearance-invested self-schema. Self-determination theory, social cognitive theory, and schematic theory are also discussed.

### Search Strategy

Studies for this review were located through the following research databases and vendors: Academic Search Premier, PsycINFO, PsycARTICLES in EBSCO, and ERIC. The following keywords were used: *appearance invested self-schemas, self-determination theory, depression, depressive affect, self-evaluative salience, motivational salience*, as well as *appearance-based rejection sensitivity*.

### Theoretical Foundation

Self-discrepancy theory provided this study's theoretical foundation. This theory states that individuals use self-guides (self-expectations) to compare themselves to internalized standards (Phillips & Silvia, 2005). Self-discrepancies are created when inconsistencies between the self and internalized standards exist. These self-discrepancies and negative psychological associations can cause an individual to experience varying levels of discomfort. Such discrepancies fall into three domains: actual, ideal, and ought (Phillips & Silvia, 2005). According to Phillips and Silvia (2005), these domains are perceived according to two perspectives: own (self) and other (significant other).

Through the theory of self-discrepancy, an individual can identify and predict the different types of incongruent ideations and their associated negative features. The actual self refers to individuals' concept of the attributes they believe they possess, while the ideal self describes the attributes individuals believe they should possess (Phillips & Silvia, 2005). Finally, the *ought* describes individuals' perceptions of the attributes that others believe they should have or would find attractive (Phillips & Silvia, 2005).

Two perspectives on self-perception exist: the own and the other (Phillips & Silvia, 2005). The *own* represents an individual's personal standpoint, while the *other* is the view of another individual who has some form of significance to the self. Parents, siblings, bosses, friends, and anyone outside of the self are often considered others (Phillips & Silvia, 2005). The others' viewpoints are the self's perception of the other person's point of view. This point of view is what the self assumes others perceive of them. Thus, the other contributes to an individual's self-perception, as that which the individual believes others perceive him or her to be (Phillips & Silvia, 2005).

Self-discrepancy theory states that depression arises from a conflict between the perceived actual-self and the ideal-self (Forston & Stanton, 1992). The ideal-self serves as a goal, an aspiration, or a standard. Different types of discrepancies are related to different types of symptoms; that is, actual/ideal discrepancies produce different symptoms from actual/ought discrepancies. An actual/ought discrepancy (the discrepancy between actual attributes and the attributes an individual believes he or she ought to have) can trigger internalized depressive affect such as guilt, anxiety, and fear. An actual/ideal discrepancy (the discrepancy between a person's actual attributes and the idealized

attributes he or she hopes to have) may trigger dejected depression, feelings of failure, and shame (Matthews & Lynn, 2008).

Self-discrepancy theory states that people become dissatisfied with their body images due to discrepancies between the ideal self (how they want to look) and the actual self (how they think they look) (Forston & Stanton, 1992). Thus, these incongruent self-representations can lead to greater body image disturbances from increased vulnerability. Higgins (1987) found that women had stronger self-guides than men, which resulted in greater self-discrepancies and self-representations (Higgins, 1987). These self-discrepancies are explored further in this chapter, through the lenses of appearance-invested self-schemas, depressive affect, and appearance-based rejection sensitivity.

#### Schematic Theory and Appearance-Invested Self-Schema

There are several theories that help explain the schematic process. Schematic theory suggests that personality is influenced by cognitive processes. In other words, cognitive organization influences self-perception and behavior (Bern, 1981). The persistent beliefs that individuals have regarding their weights and bodies shape such self-evaluations and are common cognitive structures found in individuals with eating disorders (Fairburn & Garner, 1988). Regardless of legitimacy, people's concerns about their bodies are stored in their memories and reflected upon through specific affective associations, which are readily attended to and encoded (Eldredge et al., 1990).

#### Self-Perceived Body Image and Appearance-Invested Self-Schema

Self-perceived body image refers to the self-analysis of attractiveness in reference to positive and negative views of the self (Cash, 2004). It is a multidimensional concept that includes attitudinal, affective, and perceptual dimensions (Gardner et al., 2002).

Body image describes the internal view a person uses to perceive his or her body and self (Cash, 2004). These perceptions are accompanied by affective evaluations such as shame, pride, and sadness (Pruzinsky & Cash, 2002).

Self-perceptions and attitudes are shaped by thoughts, beliefs, feelings, and behaviors that represent some aspect of the world, known as *schema* (Cash, 2004). Self-perception can be manipulated by external stimuli. Physical self-perception has four basic components: physical strength, body attractiveness, sport competence, and physical condition (Fox, 1990). Body transformation is ever changing, which means that the ideal body type of today is different than it was 10 years ago, and will continue to change in the years ahead. So too, do self-perceptions of the ideal body type. Internal conflicts can arise when an individual's perception of his or her body is a main identifying factor.

#### Self-Schema

Self-schema are the cognitive structures used to organize and interpret information in relation to the self (Rosenfield, Lennon, & White, 2005). Personal and social experiences contribute to one's development of self-schema. It is believed that negative self-schema originate in early experiences, and are maladaptive and dysfunctional (Ledoux et al., 2010). For example, if an individual believes he or she lacks intelligence, that person may have a difficult time accepting information that provides evidence to the contrary. If the individual has strong self-schema, it is possible that he or she would utilize any new situation or information to reinforce his or her beliefs about personal intelligence. If it is an inconsistent perception, such as evidence that the individual is smart, he or she may diminish or outright deny this.

It is important to understand the distinction between negative self-schema and the automatic negative thoughts that are present during periods of depression. Negative schemas are dysfunctional attitudes that lack identifiable origins. However, automatic negative thoughts do have identifiable origins (Evans et al., 2005).

Self-schema represent particular dimensions of identity (Jahee & Lennon, 2003). For example, a singer in a choir may have a “singer” schema, and thus identify with and maintain the role and responsibilities of a singer. Individuals tend to maintain different roles and schema to support different dimensions of self. Once an individual’s schema is developed, it becomes self-perpetuating because it is usually maintained by biases based on what that person remembers, attends to, and is willing to accept as true about his or herself (Banting et al., 2009; Jahee & Lennon, 2003). Schemas vary based on cultural and environmental attributes. For example, if an individual has a schema of being athletic, he might consider himself to be fit and athletic. Thus, he will process information and interpret situations based on his relevance of being fit and athletic (Banting et al., 2009). Consequently, he may alter his behaviors accordingly, opting to take the stairs instead of the elevator, or go to the gym rather than going home.

#### Appearance-Invested Self-Schema

Self-schema concerning the body reflects a person's concepts of what the body looks like, how it functions, and how it relates to one’s perceptual, conceptual, and emotional experiences (Jahee & Lennon, 2003). This idea is referred to as *body schema* (Jahee & Lennon, 2003). Body image is one component of appearance-invested self-schema that includes the following: (a) the perceptual experience of the body; (b) the

conceptual experience of the body; and (c) the emotional attitude toward the body (Jahee & Lennon, 2003).

According to Cash (1996, 2002) a better understanding of how self-schema shape body image can be assessed through a cognitive-behavioral perspective, which posits that events and experiences activate schematic processing. Life events can lead to the development of negative self-perceptions of personal appearance. Such contextual thoughts and emotions cause individuals to adjust behaviors based on these self-perceptions (Cash et al., 2004). As mentioned earlier, experiences influence the development of schema, which can become dysfunctional under intense rigidity (Patridge & Robertson, 2011). Thus, Cash et al. (2004) argued that understanding appearance-based schemas is fundamental to understanding body image perception.

#### Self-Evaluative Salience and Motivational Salience

There are two types of appearance-invested self-schemas: SES and MS. SES refers to one's "relative importance of self versus the collective within social relationships" (Rosenfield et al., 2005, p. 6). Rosenfield et al. argued that the development of psychopathology is mostly a function of one's self-salience and concerns related to others' opinions of them. SES is made up of three primary principles: an individual's evaluation of self-worth compared to others; autonomy versus connectedness in relationships; and the importance of an individual's needs and desires in relation to the importance of others'. People with high levels of SES are likely to value others' perspectives over their own, while those with low levels of SES value their own perspectives over others'. These extremes may respectively lead to the internalization or externalization of problems (Rosenfield et al., 2005).

SES measures the degree to which one's perceived social worth and sense of self are invested in appearances (Ledoux et al., 2010). For example, an individual with high SES would assess personal and social worth based on personal evaluations of his or her appearance (Cash et al., 2004). High SES has been linked to more dysfunctional and maladaptive behaviors than has high MS. For example, individuals with high SES may internalize the media's portrayal of the ideal, thin body, causing body-image dysphoria, impaired psychosocial functioning, and greater emotional dysfunction (Cash et al., 2004; Ledoux et al., 2010). Due to discrepancies between individuals' perceptions of their bodies and their perceptions of the ideal body, body image dissatisfaction is more common among individuals strongly invested in personal appearance (Partridge & Robertson, 2011).

A negative body image is related to other psychosocial problems such as eating disturbances, poor self-esteem, social anxiety, depression, and sexual inhibition (Thompson et al., 1999). Negative body image can also lead to body dysmorphic disorder (BDD, Veale, 2004), which is defined by the DSM-5 as an individual's preoccupation "with one or more perceived defects or flaws in their physical appearance, which they believe look ugly, unattractive, abnormal, or deformed" (American Psychiatric Association, 2013, p. 243). There are many risk factors associated with body image distortions, particularly in BDD, including social isolation, depression, and reduced quality of life (Veale, 2004). Elevated rates of co-morbidity and suicide attempts are also observed among those with distorted body images (Veale, 2004; Veale et al., 1996).

SES can be understood as a continuum of the importance of self, relative to the importance of others. These relational attributes are believed to develop during childhood and adolescence. Individuals with high levels of SES often view themselves as more important than others, while those with low SES usually view themselves as less important than others (Rosenfield et al., 2005). The development of salience can be attributed to several domains, including salience to an individual's sense of self, historical, attentional, cognitive, behavioral, affective, and interpersonal salience (Ledoux et al., 2010).

Researchers have identified several aspects of SES, including the following: (a) the relation of self to others; (b) the boundaries set with others; and (c) an individual's ranking of self to others. These components play significant roles in the ways one develops internalizing and externalizing problems, and can be better explained through symbolic interaction. Symbolic interaction dictates that the symbols that individuals identify with between themselves and others form their cognitive schema (Rosenfield et al., 2005).

SES has been linked to body image dissatisfaction (Cash et al., 2004; Ledoux et al., 2010; Partridge & Robertson, 2011), depression, and anxiety (Partridge & Robertson, 2011). Individuals with high levels of SES are more likely to experience self-discrepancies that affect their sense of worth and self-esteem. Increases in such self-discrepancies are due to comparisons made between physical attributes of the self and the idealized self (Partridge & Robertson, 2011).



A strong correlation exists between BMI and SES (Ledoux et al., 2005). Ledoux et al. (2005) found that the more overweight individuals were, the more likely they defined themselves by their appearances. Those overweight individuals with high levels of SES often had unhealthy eating habits, reduced psychosocial function, insecurities with others, and negative feelings about themselves. Individuals with high SES experienced more dysfunctional relationships than those with high MS (Cash et al., 2004; Ledoux et al., 2005). High SES can negatively affect self-esteem and diminish one's abilities to establish relationships with others. Such individuals often demonstrate insecure and anxious attachment styles (Ledoux et al., 2010), which describes the levels of emotional connections that individuals have toward significant people in their lives (Ledoux et al., 2005).

There is far less information available on MS than there is on SES. Motivational salience refers to the degree to which one attends to and manages one's appearance (Ledoux et al., 2005) and is measured by the emphasis placed on maintaining and enhancing their appearances through grooming behaviors (Cash et al., 2004). Unlike SES, MS is not correlated with quality of life, avoidant coping skills, self-esteem, or body dissatisfaction (Cash, Jakatdar, et al., 2004; Cash, Melnyk, et al., 2004; Cash et al., 2005; Melnyk et al., 2004; Rudiger et al., 2007).

Another behavior associated with SES is the use of clothing to camouflage problems with appearance (Tiggemann & Lacey, 2009). Both SES and MS are associated with the use of clothing to increase self-confidence (Lamarche & Gammage, 2012). Prichard and Tiggemann (2011) reported that MS predicted eating behaviors and

intentions to exercise, as well as other appearance-based behaviors such as tanning or getting manicures. MS can become dysfunctional when behaviors are excessive and conflict with other important areas of life (Lamarche & Gammage, 2012).

According to Cash and Grant (1996), a cognitive perspective on body image theorizes that contextual events activate the schematic and investment-driven processing of self-evaluative information about appearance. Thus, appearance-schematic individuals will pay more attention to, and place greater importance on, information relevant to appearance than non-appearance-schematic individuals (Cash & Labarge, 1996). Cash and Labarge (1996) developed the Appearance Schemas Inventory (ASI), which was later developed into the Appearance Schemas Inventory Revised (ASI-R). These inventories can be used to identify the extent to which individuals' core perceptions about their physical appearances are important in their lives.

#### Schema, Depressive Affect, and Gender

Beck's (1967) model of depression is based upon several cognitive concepts, including schema. Schema are the "relatively enduring internal structures of stored generic or prototypical features of stimuli, ideas, or experiences that are used to organize new information" (Clark, Beck, & Alford, 1999, p. 79). When activated, depressive schema affect the filtering, encoding, processing, interpreting, storing, and retrieving of information in a negatively biased way (Dozios & Beck, 2008). For instance, depressed individuals tend to have automatic negative or self-depreciating thoughts that lead to inaccurate or biased processing about information or life events (Dozios & Beck, 2008). Depressive affect is influenced by individuals' schema, as well as their genders. Women suffering from depression are more likely to present with neurovegetative and physical

symptoms, as well as psychological and emotional symptoms. On the contrary, depressed men are more likely to present with irritability (Rutz, 1999; Wide et al., 2011).

Although depression is commonly identified in clinical presentations, many physical health risks are associated with depression, as well. For example, diabetes and other chronic medical conditions are more common in individuals with depression (Katon et al., 2008). Further, depression may worsen the outcomes of pre-existing conditions and comorbid physical conditions, and can even result in death (Katon et al., 2008).

#### Measurements of Depression

There are many instruments used for the assessment of depressive affect, including the Patient Health Questionnaire, 9<sup>th</sup> edition (PHQ-9; Arroll et al., 2010), the Beck Depression Inventory, 2<sup>nd</sup> edition (BDI-II; Beck & Steer, 1984), and the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). Each of these instruments are briefly described, as follows.

The PHQ-9 is a widely used measurement for unipolar depression. The assessment is short (nine questions) and assists in the diagnosis of mild, moderate, and severe depression. The PHQ-9 meets the DSM-IV guidelines for assessing major depression and is often employed by primary care physicians due to its ease of use and strong correlations with the DSM-IV-TR criteria for depression (Arroll et al., 2010).

The BDI-II (Beck & Steer, 1984) is a widely used self-report inventory for the assessment and diagnosis of major depression, as indicated by criteria outlined in the DSM-IV-TR. The BDI-II was developed by Beck and adapted from the original Beck Depression Inventory. This instrument is used to measure different aspects of depression.

The first portion of the BDI-II assesses the psychological symptoms of depression, and the second portion assesses the physical symptoms. The BDI-II is composed of 21 questions, which are answered on a four-point scale that ranges from 0 (no present symptoms) to 3 (intense symptomology). The BDI-II, much like the original BDI, has a high concurrent construct and content validity (Ball & Ranieri, 1996). It also positively correlates with the Hamilton Depression Rating Scale, with a one week test-retest reliability of  $r = 0.93$ , and an internal consistency of  $\alpha = 0.91$  (Ball & Ranieri, 1996; Beck & Steer, 1984).

The CES-D (Radloff, 1977) is a 20-question, self-report inventory developed to assess depressive symptomology in the general population. Individuals respond to assessment questions based on how they have felt in the past week. Answers are recorded using a four-point Likert-type scale that ranges from *rarely* (0), some or a little of the time (1), occasionally or moderate amount of time (2) to *almost always* (3). A minimum score of 16 represents a depressed state (McDowell & Newell, 1996). The CES-D is used to assess four factors designed to cover several domains of depression, including depressed affect, positive affect, somatic and retarded activity, and interpersonal factors (Radloff, 1977).

Finally, the PHQ-9 (Arroll et al., 2010) has minimal practical advantages over other assessments such as the BDI-II (Beck & Steer, 1984). The PHQ-9 has nine items, while the BDI-II is a 21-item assessment (Titov et al., 2011). Symptoms are rated according to a 4-point Likert scale that indicates how often a symptom has bothered an individual over the past two weeks (0 = *not at all*, 1 = *several days*, 2 = *more than half*

*the days, 3 = nearly every day*). Scores are then totaled and range from 0 to 27. A score of 0 to 4 indicates no depression; 5 to 9 indicates mild depression; 10 to 14 indicates moderate depression; 15 to 19 indicates moderately severe depression; and 20 to 27 indicates severe depression (Zimmerman et al., 2008). Compound symptom criteria are assessed with a single item. For example, the PHQ-9 assesses insomnia and hypersomnia with a single item, as well as reductions or increases in appetite (Zimmerman et al., 2004).

The PHQ-9 and CES-D are available to the public, which permits clinicians to use freely without charge. In contrast, the BDI-II must be purchased and paid for per use (Dum, Pickren, Sobell, & Sobell, 2008). The CES-D is designed to assess depressive affect in five categories of symptomology and needs to meet criteria for major depressive episode, probable major depressive episode, possible major depressive episode, sub-threshold depressive symptoms, and no clinical significance of depressive episode. The CES-D was employed for this research because it measures several domains of depressive affect (depressed affect, positive affect, somatic and retarded activity, and interpersonal factors) over a 1-week period of time (Radloff, 1977).

#### Schema and Appearance-Based Rejection Sensitivity

Appearance-based rejection sensitivity refers to the degree to which an individual expects to be rejected based on his or her physical appearance, and the anxiety that such expected rejection provokes (Park, 2009). This sensitivity is the “dispositional tendency to anxiously expect, readily perceive, and overreact to rejection based on one’s physical appearance” (Park, Calogero, et al., 2010, p. 489). The theory of appearance-based

rejection was developed in 2007 to help explain levels of appearance-based rejection sensitivity based on individuals' experiences (Park, Calogero, et al., 2010).

Park (2009) conducted a study of 242 college students to measure the extent to which individuals anxiously expected others to reject them based on their physical attractiveness. The researcher reported that individuals who scored high in appearance-based rejection sensitivity were likely to experience low self-esteem, social isolation, or withdrawal. Such individuals also demonstrated insecure attachment styles and high levels of neuroticism. These individuals rated themselves as unattractive and were likely to base their self-worth on this perception. They also reported an increase in symptoms of disordered eating, such as bingeing and purging, compulsive exercising, and not eating when hungry (Park, 2009).

This current research study explored the relationships between appearance-invested self-schema and appearance-based rejection sensitivity. Understanding this relationship may help professionals better address depression as a whole. This study also examined the preliminary, pre-symptom phase of pathology. Depressive affect refers to the emotions that lead to symptoms, such as lack of involvement in usual activities and a loss of appetite. Appearance-based rejection and self-evaluative salience also examine dysfunction as a mental process before it is fully expressed. It is crucial to examine this pre-symptomatic stage because it can yield protocol for prevention and education.

Individuals with high levels of appearance-based rejection sensitivity are more likely to compare their physical attractiveness to others and experience negative emotions when doing so. This sensitivity is not related to the individual's levels of self-esteem,

attachment styles, neuroticism, or degrees to which they base self-worth on appearance. This model suggests there are multiple pathways that lead to behaviors, such as compulsive exercising, excessive dieting, purging, bingeing, and unfavorably comparing their level of attractiveness to others (Park et al., 2009).

Park, Calogero, Young, and Diraddo (2010) conducted a study of 349 students (221 women, 128 men) from an introductory psychology courses at the University at Buffalo to explore participants' levels of appearance-based rejection sensitivity. All students received course credit for their participation. The researchers found that individuals with high levels of appearance-based rejection sensitivity reported feelings of rejection and loneliness when asked to list negative the aspects of their appearance. Park et al. then directed these individuals to focus on their strengths and existing close relationships, which resulted in the expression of fewer feelings of rejection and loneliness when discussing neutral topics. However, individuals with low levels of appearance-based rejection sensitivity did not report negative feelings when discussing aspects of their appearance that they were dissatisfied with.

As mentioned previously, research indicates that gender plays a role in appearance-based rejection sensitivity. A study by Park et al. (2009) indicated that women were more sensitive to appearance-based rejection than men were (Park, DiRaddo, & Calogerro, 2009). This was especially true for perceptions of appearance based on conditional acceptance from peers. The more women and men internalized media ideals and felt that the media pressured them to look attractive, the more sensitive they were to appearance-based rejection (Park et al., 2009).

### Assessing Appearance-Based Rejection Sensitivity

There are many instruments used to measure rejection sensitivity, including the Appearance Based Rejection Sensitivity Scale (Appearance-RS; Park, 2007), Downey's Rejection Sensitivity Questionnaire (Downey & Feldman, 1996), and the Interpersonal Sensitivity Measure (IPSM; Boyce & Parker, 1989). The most commonly used among these is the Appearance-RS, which is a 15-item questionnaire scored on a Likert scale (from 1-6) that provides scenarios in which individuals might anxiously expect to be rejected based on their appearances (Park, 2007). A condensed version of the assessment, the Appearance-RS short version, is also available. The short version consists of 10-items derived from the original (Park, 2013). The Appearance-RS has demonstrated high internal consistency ( $\alpha = .90$  at Time 1;  $\alpha = .90$  at Time 2) and test-retest reliability ( $r = .69$ ) over 6- to 8-week periods (Park et. al, 2009). The Appearance-RS was chosen for this study because the content of the instrument provides a more comprehensive measure of appearance-based rejection sensitivity than the RSQ does.

The RSQ (Downey & Feldman, 1996) was designed to assess for anxious expectations of rejection by significant others. The RSQ contains 18 scenario-based questions in which respondents answer with fixed choices of *very unconcerned* or *very concerned*. They are then asked to respond to items as they believe the other person would, based on a 6-point scale ranging from *very likely* to *very unlikely*. The RSQ has high internal consistency ( $\alpha = 0.83$ ) with a test-retest reliability of 0.83 at two weeks and .78 at four months (Downey & Feldman, 1996).

Finally, the IPSM was developed by Boyce and Parker (1989) to assess hypersensitivity to interpersonal rejection, the interpersonal behaviors of others, and



social feedback based on perceived or actual negative evaluations by others. The IPSM consists of 36 items with answer choices based on a 4-point Likert-type scale that range from (1) *very unlike me* to (4) *very like me*. Factors assessed for include interpersonal awareness, the need for approval, preparation anxiety, timidity, and the fragility of the inner self. In a clinical and nonclinical sample of depressed patients, the IPSM demonstrated internal consistencies of 0.86 and 0.85, respectively (Boyce & Parker, 1989).

#### Gender

Although gender was not a primary variable in this study, it plays an important role in depressive affect and appearance-based rejection sensitivity. Researchers have reported consistent associations between gender and mental health conditions. When faced with life stressors or tribulations, women have a greater tendency to internalize such stressors, while men are more likely to externalize them (Rosenfield et al., 2005).

Research by Ledoux (2005) indicated that negative self-schema and insecure attachment styles among men were significantly associated with both types of appearance-invested self-schema; however they were more strongly associated with SES than MS. Further, SES was more strongly related to negative core beliefs and dysfunctional relational styles in men than MS was (Ledoux et al., 2005).

Women's self-schema seems to affect them differently than men's, especially in terms of their beliefs about attracting the opposite sex. According to Ledoux et al. (2010), women might be motivated to have an attractive appearance to deal insecurities over their perceived attractiveness to men. Often, women assume that they need to invest more

energy in their physical appearances in to gain male attention (Ledoux et al, 2010), which is a behavior indicative of high levels of SES.

Additional research correlates several factors with the weight-related issues experienced by some women. For example, studies indicate that women with a BMI of 30 or greater and only 12 years of education were more likely to experience mood disorders (Ginis et al., 2005; Ledoux et al., 2010). In addition, women with pathological eating behaviors and poor body images tended to experience overall negative self-schema (Ledoux et al., 2010).

Theorists have argued that rejection sensitivity is based on life experiences that may cause some individuals to develop more targeted rejection sensitivity biases (Bowker, Thomas, Spencer, & Park, 2012). Factors such as race, gender, and sexual orientation can cause individuals to develop rejection sensitivities. Women may be especially sensitive to gender-based rejection. Bowker et al. (2012) found that appearance-based rejection sensitivity from gender was tied to conditional peer acceptance, media pressure among adolescent girls, social avoidance, perceived unattractiveness, and body image problems. Adolescents are especially susceptible to appearance-based rejection, which may increase the risks of psychological maladaptation. Notably, adolescent girls report more appearance-based rejection than boys (Bowker et al., 2012).

Myers and Crowther (2007) reported that sociocultural contexts, pressures, and idealizations of thinness were also associated with body dissatisfaction, often indicated by beliefs that certain body parts are too large. According to the researchers, this belief

system is a significant problem among women, with up to 80 percent of university women reporting dissatisfaction with their bodies. Myers and Crowther explained that such dysfunctional thoughts were often caused by individuals' inability to meet social ideals of what is considered attractive. These cultural ideals are often disseminated through the media and encouraged by families and peers. It is suggested that the objectification of women also played a role in this process because women's bodies are seen as objects. In turn, a woman is not viewed as an entire person, but as portions of her physical body. This mainstream objectification can result in self-objectification, shame, anxiety, eating disorders, and depression (Myers & Crowther, 2007).

#### Summary

Researchers have concluded that depression, anxiety, loneliness, and anger are measurable effects of rejection (Leary, Twenge, & Quinlivan 2006; Wilhelm, Boyce, & Brownhill, 2004). Boyce et al. (1991) found that high levels of interpersonal sensitivity may predict the onset of depression in individuals. Sensitivity to interpersonal rejection can be a precursor to depression and low self-confidence (McCabe, Blankstein, & Mills, 1999). These relationships suggest that appearance-invested self-schema may correlate with appearance-based rejection sensitivity and depressive affect; however, these relationships have not been studied.

Although research indicates that negative self-schemas are associated with both SES and MS, a stronger link with SES has been indicated. Researchers have also found that women may be motivated to have an attractive appearance to cope with feelings of insecurity with men in general (Ledoux et al, 2010). The current study involved an examination of the relationship between self-evaluative schema, depressive affect, and

appearance-based rejection sensitivity. In Chapter 3, the methodology, research design, data collection, and analysis procedures are described. The methodology chapter also includes a restatement of the research questions and hypotheses, a description of the sample and sample selection, and a discussion of the variables, data analysis, data collection, and ethical considerations.

### Chapter 3: Research Method

#### Introduction

Multiple cognitive and affective factors play a role in the development of appearance-invested self-schemas, depressive affect, and appearance-based rejection sensitivity. The purpose of this quantitative study was to understand the psychological effects of appearance-invested self-schema among a population of women enrolled in the continuing education program at a Midwestern university. This study was designed to examine the influence of self-evaluative salience and motivational salience (SES and MS) on depressive affect and appearance-based rejection sensitivity. This chapter includes a description of the study's design, participants, demographics, instrumentation, data analysis, and ethical considerations.

#### Research Design and Rationale

This study used a quantitative methodological design. Because the goal of the research was to examine the statistically significant effects of quantifiable (i.e., numerically measurable) concepts, this was an appropriate method (Howell, 2010). The focus of this research was to investigate the effects of SES and MS on depressive affect and appearance-based rejection sensitivity. These concepts were measured by the operationalization of the four variables of interest, as described in Table 1. The independent variables were appearance-invested self-schemas (SES and MS), as measured by the Appearance Schemas Inventory (ASI-R). The dependent variables were depressive affect and appearance-based rejection sensitivity, as measured by the Center for Epidemiologic Studies Depression Scale (CES-D) and the Appearance Based Rejection Sensitivity Scale (Appearance-RS), respectively. This study used two multiple

regression equations. One multiple regression equation was used to evaluate the influence of self-evaluative salience and MS) and the dependent variable (depressive affect).

Another multiple regression equation was used to evaluate the relationships between independent variables (SES and MS) and the dependent variable of Rejection Sensitivity.

Table 1

<i>Research</i>		<i>Design</i>		<i>Variables</i>	
Regression 1		Regression 2			
Predictors	Dependent Variable	Predictors	Dependent Variable		
SES, MS	Depressive Affect	SES, MS	Rejection Sensitivity		

Quantitative methods are appropriate when a description or explanation of the relationships between variables is required (Creswell, 2009). A quantitative, correlation method (predictive model) was chosen for this research because the variables could be operationalized in numeric format (Pagano, 2009). This method allowed me to conduct multiple linear regression analyses to determine how SES or MS affected depressive affect and appearance-based rejection sensitivity. A quantitative survey design is appropriate because the variables were not manipulated, the study represents behaviors that occur naturally in the environment, and the study may be used to explain various interrelationships of nonmanipulated variables (Tabachnick & Fidell, 2012).

For this study, I used a standard multiple regression analysis to determine if there was a relationship between appearance-invested self-schemas (SES and MS) and depressive affect, or appearance-invested self-schemas and appearance-based rejection sensitivity among a sample of female college students. This study did not require

extensive time to complete, and thus, is not time limiting. There were no resource constraints related to the use of this design.

#### Methodology

##### Population

The study population consisted of a convenience sample of women between the ages of 19 and 60 in attendance at a Midwestern university. All participation was voluntary. For this study, 142 participants were recruited. IRB approvals from Walden University (No. 06-17-15-0068389) and the study site university were obtained before the study began.

##### Sampling Procedures

Participants were recruited from the population of women attending a Midwestern university. The sample included women of any ethnicity ranging in age from 19 to 60 years old. All participants were currently enrolled in the university's continuing education program. Course instructors of prospective participants were contacted via email and provided with details regarding the study's purpose, methods, and ethical procedures. Course instructors were sent an email with the *Participant Solicitation Letter* which included the researcher's contact information, and were asked to forward it to students to invite them to participate. Interested students were directed to the survey through a hyperlink provided in the email, and asked to electronically provide informed consent on the survey host site prior to accessing the survey. The informed consent form indicated that participation was entirely voluntary and was not a coursework requirement. This form also informed prospective participants that their participation was anonymous, and the instructor would have no knowledge of which students did or did not participate.

Those individuals who provided informed consent were directed to the first page of the survey.

This study employed a regression analyses to examine the research questions. A power analysis using G\*Power 3.1 software (Faul, Erdfelder, Buchner, & Lang, 2009) was conducted to determine the appropriate sample size for this study. Based on previous research with the ASI, a moderate effect size,  $f^2 = .15$  (Hosoda et al., 2003), was chosen. Using these parameters, a minimum sample size of 106 participants was calculated (Faul et al., 2009). This study needed to recruit at least 133 participants with a predicted 20% dropout. For this study, 142 participants were recruited, and a total of eight participants were removed for missing responses. Therefore the final analysis was conducted on a total of 131 participants, exceeding the minimum of 106 needed to account for the 20% drop out rate.

#### Procedures for Recruitment, Participation, and Data Collection

Data were collected using the commercial survey host service, Survey Monkey. A letter of participant solicitation was provided to instructors via email, and was forwarded to the targeted students. The study was presented as an opportunity for students to participate in a research project. In the letter, inclusion criteria were outlined to indicate that prospective participants must be women between the ages of 19 and 60 years old. The inclusion criteria was also stated at the beginning of the survey to reduce the chances of participation from ineligible individuals. Informed consent forms were provided to each participant, which were required to be read and accepted prior to participation. After completion of the study survey, there were no particular forms for exiting the study and no follow-up procedures were necessary. Each participant's data were reviewed to



ensure completeness. Subsequent data were entered into SPSS v.22 program for final analysis.

#### Measures

The following three instruments were included in the study survey: the Center for Epidemiologic Studies Depression Scale (Radloff, 1977), the Appearance Schemas Inventory (Jakatdar et al., 2006) and the Appearance Based Rejection Sensitivity Scale (Park, 2013). The Center for Epidemiologic Studies Depression Scale is available through public domain; this instrument is provided in Appendix B. The Appearance Schemas Inventory (see Appendix C) was purchased from Cash, which grants individual researchers permission to use it in research. I obtained written permission (see Appendix D) to use this measure.

The Appearance-RS is available to researchers through public domain and is provided in Appendix E. The instruments were preceded by an informed consent form and a brief demographic section, which collected demographic details and screened participants for eligibility. The instruments were administered in order of the independent variable (SES and MS) followed by the dependent variables (depressive affect and appearance-based rejection sensitivity).

**Appearance Schemas Inventory ASI-R.** The two independent variables of the study (SES and MS) were measured using the ASI-R (Jakatdar et al., 2006), which is an extensive revision of Cash and Labarge's (1996) original assessment of dysfunctional schematic psychological investment in physical appearance (see Appendix C). All items are rated on a 5-point Likert-type scale from (1) *strongly disagree*, (2) *mostly disagree*, (3) *neither agree nor disagree*, (4) *mostly agree* to (5) *strongly agree*. The inventory

consists of a 20-item measurement of two subscales of SES (12 items) and MS (8 items), and required approximately five minutes to complete. SES measures the extent to which individuals define themselves and their self-worth by their physical appearances. MS measures the extent to which individuals attend to their appearances and engage in appearance managing behaviors. This assessment has good discriminate and convergent validity, and correlates with pertinent body image and psychosocial functioning variables (Jakatdar et al., 2006). Cronbach's alpha reliability of the 12-item SES factor was .82 for women and .84 for men. Reliability of the eight-item MS factor was .90 for women and .91 for men. Therefore, the reliabilities of the ASI-R and its two subscales were quite satisfactory for both genders.

The ASI-R is scored as a mean of survey item responses corresponding to each subscale. Scoring is done by first reverse coding items 1, 4, 5, 9, 11, and 12. The composite ASI-R score is the mean of the 20 items. SES is calculated as the mean of items 2, 5, 7, 8, 9, 11, 13, 14, 15, 16, 19, and 20. MS is calculated as the mean of items 1, 3, 4, 6, 10, 12, 17, and 18 (Jakatdar, et al., 2006). Sample items from the SES subscale include: "When I see good looking people, I wonder how my own looks measure up," and "I seldom compare my appearance to that of other people I see" (Jakatdar et al., 2006, p. 1). Sample items from the MS subscale include: "I try to be as physically attractive as I can be," and "I often check my appearance in a mirror just to make sure I look okay" (Jakatdar et al., 2006, p. 1).

**Center for Epidemiologic Studies Depression Scale.** The first dependent variable, depressive affect, was measured with the CES-D (Radloff, 1997; see Appendix

B). The CES-D is a 20-item self-report scale used to identify depressive affect and takes 5-10 minutes to complete. The assessment is designed to measure depressive symptoms in the general population, and conceptualizes depression along a continuum rather than as a dichotomous state. All inventory items were adapted from previously validated depression scales (Radloff, 1977).

The CES-D requires participants to respond to questions according to how they felt during the previous week. Responses are based on a 4-point Likert-type scale ranging from *rarely* (0) to *almost always* (3). The CES-D consists of four positively worded items that are reverse coded and 16 negatively worded items. The scoring of positive items (4, 8, 12, and 16) are reversed before they are used to calculate participants' overall scores. Possible final scores range from 0 to 60, with higher scores indicating the presence of more symptomatology. The CES-D assesses for four factors designed to cover several domains of depressive affect including; depressed affect, positive affect, somatic and retarded activity, and interpersonal factors (Radloff, 1977). The 20 items of the CES-D measure symptoms of depression in nine different areas, as defined by the DSM-IV-TR (American Psychiatric Association, 2000).

The CES-D (Radloff, 1977) has demonstrated content validity, criterion-related validity, and construct validity (Geisser, Roth, & Robinson, 1997). Reliability was established through inter-item and item-scale correlations. The corrected split half correlation and coefficient alpha were high (.85 to .92). This research utilized only the Total CES-D Score, which was calculated as the sum of responses to all 20 questions. Higher scores indicate greater depressive affect (Radloff, 1977).

**Appearance-Based Rejection Sensitivity Scale Short Format (Appearance-RS).** The second dependent variable, appearance-based rejection sensitivity, was measured using the Appearance-RS (Park, 2013; see Appendix E). The Appearance-RS is a 10-item version of the original 15-item questionnaire and takes approximately 5-10 minutes to complete. The instrument contains 10 scenarios in which individuals might anxiously expect to be rejected based on their appearance (Park, 2013). Participants rate their rejection concerns according to a 6-point Likert-type scale. Appearance-based rejection sensitivity was calculated by multiplying the degree of anxious concern by the degree of rejection expectation for each situation. Overall Appearance-RS scores were then calculated by computing a mean of the 10 scores. This scale has demonstrated high internal consistency, validity, and test-retest reliability (Park, 2007). The Appearance-RS has high internal consistency ( $\alpha = .90$  at Time 1;  $\alpha = .90$  at Time 2) and test-retest reliability ( $r = .69$ ) over 6- to 8-week periods (Park et. al, 2009).

#### Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 22 for Windows. Screening was conducted to determine if data met the assumptions of the analyses. Participants were required to check a box indicating they meet the inclusion criteria prior to viewing the survey. As a measure of caution, demographic information was reviewed to ensure that each participant met inclusion criteria for gender, age, and enrollment in a continuing education program. Demographic information regarding ethnicity and age was also collected to present details regarding the composition of the sample. A multiple regression analyses was performed to determine if

any relationships existed between the independent variables (SES and MS) and dependent variables (depressive affect and appearance-based rejection sensitivity).

#### Research Questions and Hypotheses

RQ1. What is the relation between appearance-invested self-schema and depressive affect?

*H1<sub>0</sub>*. There is no significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R; Jakatdar, Cash, & Eagle, 2006) and depressive affect as measured by the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) in a sample of college student women.

*H1<sub>A</sub>*. There is a significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar et al., 2006) and depressive affect as measured by the Center for Epidemiologic Studies Depression Scale (CES-D: Radloff, 1977) in a sample of college student women.

RQ2. What is the relation between appearance-invested self-schema and appearance based rejection sensitivity?

*H2<sub>0</sub>*. There is no significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar et al., 2006) and appearance

based rejection sensitivity as measured by the Appearance Based Rejection Sensitivity Scale Short Format (Appearance-RS: Park, 2013) in a sample of college student women.

*H2<sub>A</sub>*. There is a significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar et al., 2006) and appearance based rejection sensitivity as measured by the Appearance Based Rejection Sensitivity Scale Short Format (Appearance-RS: Park, 2013) in a sample of college student women.

In order to assess research question two, a multiple linear regression analysis was used. Multiple linear regression is the appropriate analysis when the goal of research is to determine the extent of relation between a set of multiple continuous or dichotomous independent variables and a single continuous dependent variable (Tabachnick & Fidell, 2012). In this analysis, the two independent variables were self-evaluative salience and motivational salience; both of these are continuous in level. The dependent variable was appearance-based rejection sensitivity; this variable is also continuous in level. The following regression equation (main effects model) was used:  $y = b_0 + b_1 * x_1 + b_2 * x_2 + e$ ; here,  $y$  = appearance based rejection sensitivity,  $b_0$  = constant,  $b_1$  = regression coefficient for self-evaluative salience,  $b_2$  = regression coefficient for motivational salience,  $x$  = the predictor variables themselves, and  $e$  = the residual error (Tabachnick & Fidell, 2012). An alpha of .05 was used to determine significant associations.

### Multiple Linear Regression

Due to numerous bivariate observations in the analyses, multiple regressions were conducted to assess the collective effect that the independent variables had on the dependent variables. This method results in fewer analyses than a series of bivariate correlations, with the goal to reduce the risks of Type I errors. Type I errors are indicated by relationships that exist only by chance (Stevens, 2009).

Simultaneous multiple regression (the enter method) was used. Unless theory sufficiently supports a specific method of entry, the standard multiple regression is the appropriate method of entry. Variables were evaluated based on their contribution to the prediction of the dependent variable that is different from the predictability provided by the other independent variables (Tabachnick & Fidell, 2012). An  $F$  test was used to assess whether the set of independent variables collectively predicted the dependent variable.  $R^2$ , the multiple correlation coefficient of determination, was reported and used to determine how much variance in the dependent variable could be accounted for by the independent variables. A  $t$  test was used to determine the significance of each predictor, and beta coefficients were used to determine the extent of prediction for each independent variable. For significant predictors, every one-unit increase in the predictor, the dependent variable will increase or decrease by the value of the corresponding unstandardized beta coefficient.

Prior to analysis, the assumptions of multiple linear regression were assessed. These assumptions included normality, homoscedasticity, and the absence of multicollinearity. Normality assumes a normal bell curve distribution between the predictor variables and the criterion variable; homoscedasticity assumes that scores are

near equal distributed about the regression line. Normality and homoscedasticity were assessed by examination of scatter plots (Tabachnick & Fidell, 2012). The absence of multicollinearity assumes that predictor variables are not too closely related and were assessed using Variance Inflation Factors (VIF). VIF values over 10 suggested the presence of multicollinearity and a violation of the assumption (Stevens, 2009).

#### Threats to Validity

Several inherent limitations exist within the scope of quantitative study. Foremost, the use of a quantitative method is able to address the research question and hypotheses, but is unable to adequately examine the depth and underlying perceptions and experiences, such as those related to appearance-invested self-schemas and how participants viewed the effect of this phenomenon on depressive affect or appearance-based rejection sensitivity. Thus, this study traded this degree of depth for statistical certainty that any indicated associations did not occur by chance. In addition, participants may have misunderstood one or more of the instruments, or not respond truthfully. It was also possible that participants may have misread the instruments or response categories.

#### Ethical Procedures

Permission to conduct this study was obtained from the Walden University IRB and the IRB of the Midwestern university that was the site of recruitment. Careful consideration was given to the nature of this study and its possible effects on participants. The informed consent form was included in the online survey to discuss participation procedures, confidentiality issues, the voluntary nature of the study, the risks and benefits of participation, and contact information for the researcher and her advisor.



The informed consent form stated that all study records would be kept anonymous and that only the researcher would have access to those records. Potential participants were notified that they were free to withdraw from the study at any time during the process without consequence. It was important that the students were fully aware that their participation in the study was in no way related to their coursework. To remedy this potential harm, course instructors were asked to state that participation was entirely voluntary, and did not relate to the course requirements in any way. Instructors were also asked to notify students that they would have no knowledge of which students did or did not participate. This information was reiterated in the informed consent form provided prior to inclusion in the study.

There were no physical risks or benefits related to study participation. However, there was the potential for emotional upset as participants reflected on current emotional states and schemas. Participants were notified that there was no obligation to complete any part of the study that they feel uncomfortable with. Although data breaches are always possible when data are collected and transmitted over the internet, the survey was hosted by a well-established commercial service to reduce such risks. No data breaches occurred during this investigation.

Informed consent was obtained from each participant to indicate agreement and understanding of study conditions. IP addresses were not recorded, thus omitting abilities to trace participants' identification. Participants indicated consent by checking a box on the survey host site, which stated that they understood and agreed to the terms. When this box was checked, they were automatically transferred to the online survey. All of the data

were anonymous and are kept in password-protected files. The data will be kept for a period of 5 years. At the close of the five-year period, data will be permanently destroyed.

#### Summary

This study utilized two multiple regression equations to explore the relation between appearance invested self-schemas (SES and MS) and dependent variables (depressive affect and appearance-based rejection sensitivity). The potential benefits of understanding these relations may help identify specific interventions to promote healthy appearance-invested self-schemas with regard to appearance-based rejection sensitivity and depression. This study shed light on how appearance-invested self-schemas affect depressive affect and appearance-based rejection sensitivity. The results are presented in Chapter 4 and interpreted in Chapter 5.

## Chapter 4: Results

Although the psychological effects of physical appearance have been studied among the general population, relatively few studies on the relationship between appearance-based self-schemas and depressive affect have been conducted. Even less is known about self-schemas and appearance-based rejection sensitivity. The purpose of this quantitative survey study was to investigate the relationship between SES and MS among a population of female college students using two multiple regression analyses. It was expected that SES and MS would both be significantly related to depressive affect and appearance-based rejection sensitivity.

The multiple regression analyses evaluated two main relationships. The first relationship examined was between the appearance-invested self-schemas (SES and MS) and depressive affect. Then the relationship between appearance-invested self-schemas (SES and MS) and appearance-based rejection sensitivity was analyzed. This chapter provides a description of the data collection process, study sample, and a brief overview of the research findings. In the following sections, the details of the analysis and specific statistical outcomes are presented, with notation of any violations to the assumptions of the multiple linear regression analysis.

### Data Collection

Data were collected from 142 respondents to the electronically hosted survey on Survey Monkey. These responses were collected over the course of 4 months, and imported directly from the survey host site as an SPSS formatted data file. Prior to use in the following analyses, the data were assessed for eligibility, extreme univariate outliers, and incomplete responses. Any participants who did not meet the inclusion criteria (i.e.,

being female and between the ages of 19 and 60) were removed from the data set. A total of three participants were removed for not providing their age or for being under 19 years. To assess for incomplete responses, each observation was checked to determine if the participant provided enough responses to complete each scale of interest. If one or more of the scales were missing due to zero responses to the corresponding survey items, the observation was removed from the data set. A total of eight participants were removed for missing responses. Therefore the final analysis was conducted on a total of 131 participants.

### **Descriptive Statistics**

The majority of the participants were white (77, 59%) with 17 participants identifying as Hispanic or Latino (13%) and 17 participants identifying as Black or African American (13%). Most of the participants reported to be enrolled in continuing education or an online-based program rather than a traditional classroom setting (118, 90%). All of the participants were female, as this was part of the inclusion criteria. The frequencies and percentages for the demographic information can be found in Table 1. The age of the participants ranged from 19 years to 58 years of age, with a mean of 32.44 years and a standard deviation of 9.26 years.

Table 1

*Frequencies and Percentages for Demographic Information*

Demographic	<i>n</i>	%
Ethnicity		
Hispanic or Latino	17	13
Asian	10	8
Black or African American	17	13
Native Hawaiian or Pacific Islander	1	1
White	77	59
Other	9	7
Enrollment in Continuing Education/Online Based Program		
Yes	118	90
No	12	9
No Response	1	1

*Note.* Percentages may not add to 100% due to rounding error.

#### Study Variables

The SES score ranged from 1.82 to 5.00 with a mean of 3.79 and a standard deviation of 0.78, while the MS score ranged from 2.50 to 5.00 with a mean of 3.91 and a standard deviation of 0.65. The dependent variable depressive affect ranged from 0.90 to 3.15 with a mean of 1.87 and standard deviation of 0.63, and the dependent variable appearance-based rejection sensitivity ranged from 1.00 to 6.00 with a mean of 4.31 and a standard deviation of 1.39. The descriptive statistics for continuous data is presented in Table 2.

Table 2

#### *Descriptive Statistics for Continuous Information*

Variable	Min.	Max.	<i>M</i>	<i>SD</i>
Age	19	58	32.44	9.26
SES score	1.82	5.00	3.79	0.78
MS score	2.50	5.00	3.91	0.65
Depressive affect	0.90	3.15	1.87	0.63
Appearance-based rejection sensitivity	1.00	6.00	4.31	1.39

## Results

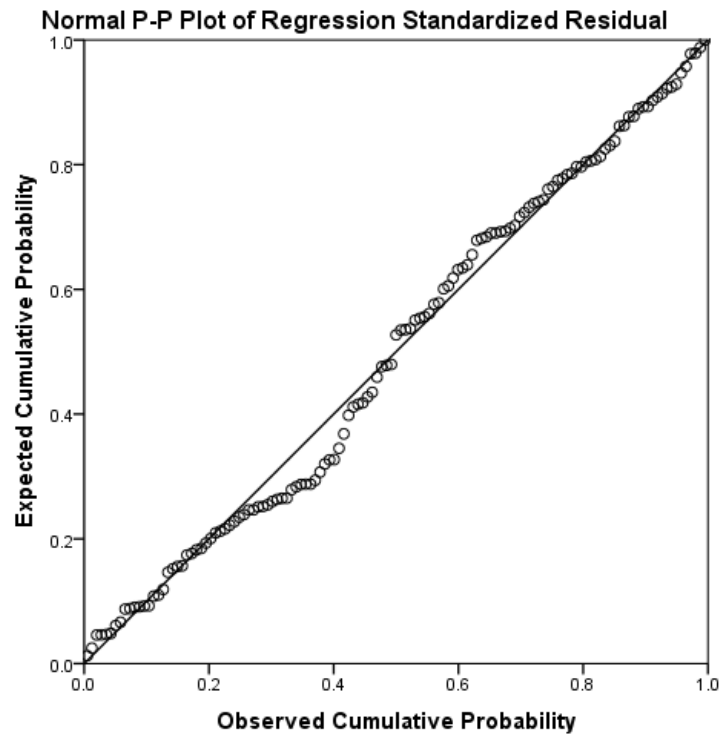
### Research Question 1

What is the relationship between appearance-invested self-schemas and depressive affect?

**H1<sub>0</sub>:** There is no significant relationship between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R; Jakatdar, Cash, & Eagle, 2006) and depressive affect as measured by the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) in a sample of college student women.

To assess RQ1, a multiple linear regression was conducted. In this analysis, the predictor variables were SES and MS, as measured from the ASI-R. The outcome variable was depressive affect, as measured by the CES-D. Prior to analysis, the assumptions of the multiple linear regression were assessed. In conducting a multiple regression analysis, the regressions must meet the assumptions of normality, homoscedasticity, and absence of multicollinearity.

**Assumptions.** To assess normality, a normal P-P plot was created and visually assessed. The plot showed that the data does not deviate strongly from a normal distribution. Therefore, the assumption of normality was met. The normal P-P plot can be seen in Figure 1.



*Figure 1.* Normal P-P Plot.

To assess homoscedasticity, a residual scatterplot was constructed and visually assessed. This plot indicated that the residuals were randomly and equally distributed around zero. Thus, the scatterplot indicated that the error terms were randomly distributed and the assumption of homoscedasticity was maintained. The scatterplot of residuals is presented in Figure 2.

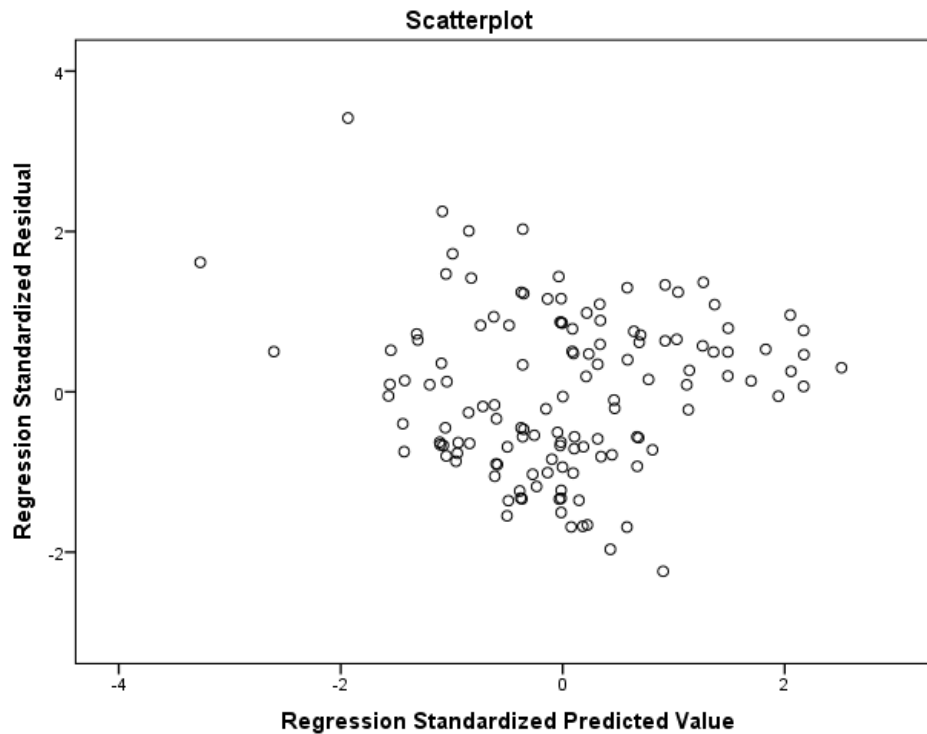


Figure 2. Scatterplot of residuals.

The absence of multicollinearity was assessed using variance inflation factors (VIFs), where calculated VIFs should not exceed 10 (Stevens, 2009). The VIF was 1.22 (Tolerance = 0.82), indicating that there was a low level of multicollinearity in the data and that the assumption of absence of multicollinearity could be maintained.

Results of the multiple linear regression analysis of depressive affect on SES and MS indicated that the model was significant,  $F(2, 128) = 39.05, p < .001$ , with an overall  $R^2$  of .38. This  $R^2$  value indicated that 38% of the variance in depressive affect could be explained by a linear combination of SES scores and MS scores. The results indicated that SES scores were a significant predictor of depressive affect,  $t(129) = 8.76, p < .001$ , partial  $r = .61$ , after controlling for MS. The value of the coefficient,  $B = 0.55$ , suggested



that a one point increase in SES scores would lead to a 0.55 point increase in depressive affect if SES scores were held consistent. Further, the partial  $r$  coefficient (.61) indicated that the correlation between SES and depressive affect was positive and strong, even after removing the effect of MS on depressive affect (Cohen, 1988).

The results also indicated that MS scores were a significant predictor of depressive affect scores,  $t(129) = -4.73, p < .001$ , partial  $r = -.39$ , after controlling for SES scores. The regression coefficient for MS scores,  $B = -0.35$ , suggested that a one point increase in MS score would lead to a 0.35 decrease in depressive affect if SES scores were held constant. Examination of the partial  $r$  coefficient (-.39) indicated that the correlation between MS and depressive affect had an inverse medium strength after removing the effect of SES (Cohen, 1988).

The results of the multiple linear regression analysis indicated that the null hypothesis should be rejected in favor of the alternative, which stated that there is a significant relation between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar, Cash, & Eagle, 2006) and depressive affect as measured by the Center for Epidemiologic Studies Depression Scale (CES-D: Radloff, 1977) in a sample of college student women. Results are presented in Table 3.

Table 3

*Results for Multiple Regression of Depressive Affect on SES and MS*

.3839.05< .001	<i>R</i>	Regression model1		<i>p</i>	<i>t</i>	<i>p</i>
		<i>R</i> <sup>2</sup>	<i>F</i>			
Variables.62	<i>B</i>	SE	$\beta$	Partial <i>r</i>		
Overall model						
SES	0.55	0.06	0.67	.61	8.76	< .001
MS	-0.35	0.08	-0.36	-.39	-4.73	< .001

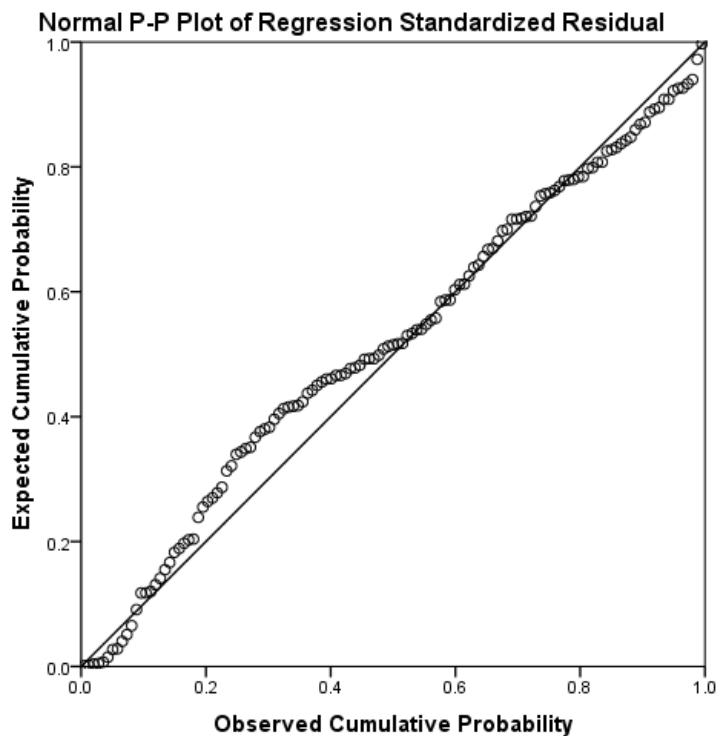
#### Research Question 2

What is the relationship between appearance-invested self-schemas and appearance based rejection sensitivity?

**H<sub>20</sub>**: There is no significant relationship between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar et al., 2006) and appearance based rejection sensitivity as measured by the Appearance Based Rejection Sensitivity Scale Short Format (Appearance-RS: Park, 2013) in a sample of college student women.

To assess RQ2, a multiple linear regression analysis was conducted. In this analysis, the predictor variables were SES and MS, as measured from the ASI-R. The outcome variable was appearance based rejection sensitivity as measured by the Appearance-RS. Prior to analysis, the assumptions of the multiple linear regression were assessed. In conducting a multiple regression analysis, the researcher assumed that the regression met the assumptions of normality, homoscedasticity, and an absence of multicollinearity.

**Assumptions.** To assess normality, a normal P-P plot was constructed and visually assessed. The plot was found to show that the data did not deviate strongly from normality. Therefore, the assumption of normality was met. The normal P-P plot can be seen in Figure 3.



*Figure 3.* Normal P-P plot.

To assess homoscedasticity, a residual scatterplot was constructed and was visually assessed. This plot indicated that the residuals were randomly and equally distributed around zero. Thus, the scatterplot indicated that the error terms were randomly distributed and the assumption of homoscedasticity was maintained. The scatterplot of residuals is presented in Figure 4.

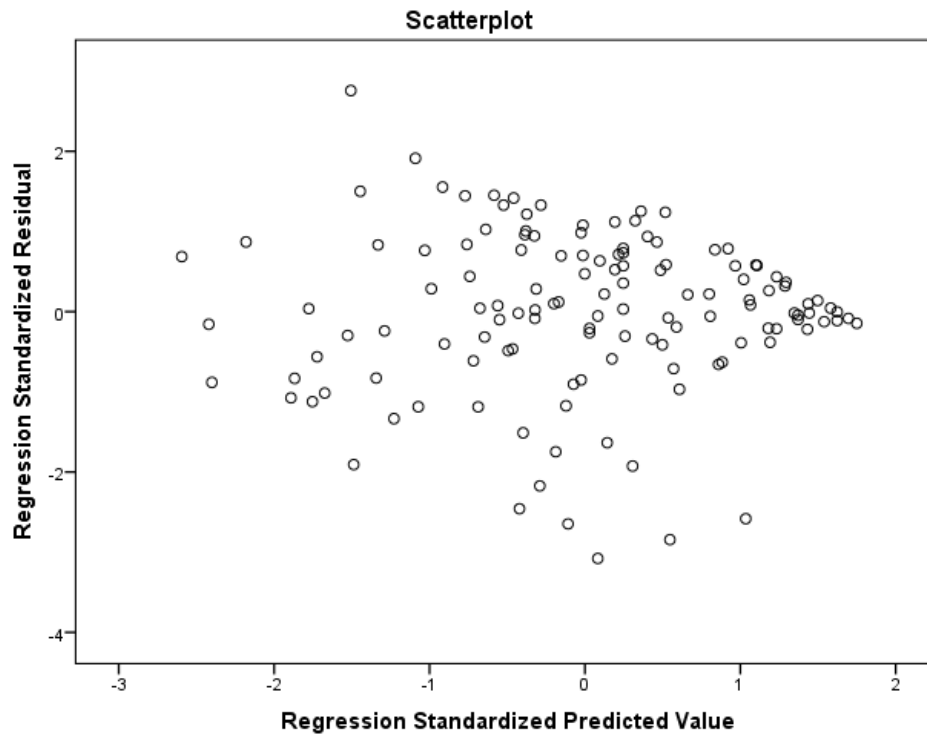


Figure 4. Scatterplot of Residuals

The absence of multicollinearity was assessed using variance inflation factors (VIFs), where calculated VIFs should not exceed 10 (Stevens, 2009). The VIF was 1.22 (Tolerance = 0.82), which indicated that there was a low level of multicollinearity in the data and that the assumption of absence of multicollinearity could be maintained.

Results of the multiple linear regression analysis of appearance based rejection sensitivity on SES and MS indicated that the model was statistically significant,  $F(2, 128) = 82.04, p < .001$ . The coefficient of determination for the overall model,  $R^2 = .56$ , suggested that 56% of the variability in the dependent variable was explained by a linear distribution of the independent variables. The regression indicated that SES score was a significant predictor of appearance-based rejection sensitivity,  $t(12.45), p < .001$ , partial  $r$

= .74, after controlling for MS scores. The regression coefficient  $B = 1.43$  suggested that a one point increase in SES score would yield a 1.43 point increase in appearance-based rejection sensitivity score if MS scores were held constant. The partial  $r$  coefficient (.74) indicated that the relationship between SES and appearance-based rejection sensitivity was very strongly positive, even after removing the effect of MS (Cohen, 1988).

The predictor MS score was found to be statistically significant,  $t(129) = -2.54$ ,  $p = .012$ , partial  $r = -.22$ , after controlling for SES scores. The regression coefficient for MS score,  $B = -0.35$ , suggested that a one point increase in MS score would yield a 0.35 decrease in appearance-based rejection sensitivity score when SES scores were held constant. Examination of the partial  $r$  coefficient (-.22) indicated that the relationship between MS and appearance-based rejection sensitivity was weakly inverse after controlling for the effect of SES (Cohen, 1988).

The results of the multiple linear regression indicated that the null hypothesis should be rejected in favor of the alternative hypothesis. There was a significant relationship between self-evaluative or motivational salience as measured by the Appearance Schemas Inventory-Revised Scale (ASI-R: Jakatdar et al., 2006) and appearance based rejection sensitivity as measured by the Appearance Based Rejection Sensitivity Scale Short Format (Appearance-RS: Park, 2013) in a sample of college student women. Results are presented in Table 4.

Table 4

*Results for Multiple Regression of Appearance Based Rejection Sensitivity on SES and MS*

	Regression model 2					
	$R$	$R^2$	$F$	$p$		

Overall model	.75	.56	82.04	< .001		
Variables	<i>B</i>	<i>SE</i>	Partial <i>r</i>	$\beta$	<i>t</i>	<i>p</i>
SES	1.43	0.12	.74	0.80	12.45	< .001
MS	-0.35	0.14	-.22	-0.16	-2.54	.012

#### Summary of the Findings

Two multiple linear regressions were conducted with the intention to examine the degree to which SES and MS scores can be used to predict depressive affect and appearance based rejection sensitivity. Results of the first regression indicated that SES is a significant predictor of depressive affect with a direct relationship and MS is significant predictor of depressive affect with an inverse relationship. In other words, participants with higher SES scores tended to have higher depressive affect scores, and participants with higher MS scores tended to have lower depressive affect scores. Results of the second regression indicated that both SES and MS scores are unique and significant predictors of appearance-based rejection sensitivity such that SES was directly related to the outcome variable and MS is inversely related to the outcome variable. Participants with higher SES scores tended to have higher appearance-based rejection sensitivity scores, and participants with higher MS scores tended to have lower appearance-based rejection sensitivity scores. Both of the null hypotheses are rejected in favor of the respective alternative hypotheses.

#### Summary

Chapter 4 included a restatement of the problem and the purpose in order to contextualize the results. This statement was followed by a report on the various demographic features of the collected sample and a brief summary the data collection and treatment process. This chapter includes the results of data collection and analyses, and

results from testing the null hypotheses established in the current study. Research questions were then analyzed in detail, and the results were organized by the research question that each analysis informed. These results were interpreted to determine whether the respective null hypothesis could be rejected. Data were assessed by frequency analysis and multiple regression analysis. Chapter 5 will contain a synthesis and interpretation of these findings with the extant literature, and discussion regarding potential for future study.

## Chapter 5: Discussion

### Introduction

Multiple cognitive and affective factors play a role in the development of appearance-invested self-schemas (SES and MS), depressive affect, and appearance-based rejection sensitivity. Although the psychological effects of physical appearance have been studied among the general population, little was known about the relationship between appearance-based self-schemas and depressive affect. Even less was known about self-schemas and appearance-based rejection sensitivity. Self-evaluative salience (SES) describes the degree to which an individual bases his or her perceived social worth and sense of self on physical appearance (Ledoux et al., 2010). Motivational salience (MS) refers to the degree to which individuals attend to and manage their appearances (Ledoux et al., 2010), and is measured by the significance an individual places on enhancing his or her appearance through grooming behaviors (Cash et al., 2004). Appearance-based rejection sensitivity describes the degree to which an individual anticipates rejection due to their physical appearance, thus provoking some degree of anxiety (Park et al., 2009). The view of self is externally (socially) and internally constructed, which means that individuals are susceptible to creating distorted, negative views of themselves (Phillips & Silvia, 2005). Self-discrepancy theory suggests that when there is a discrepancy between the ideal self (the attributes individuals believe they should possess) and actual self (the individuals' concept of the attributes they believe they possess), an individual will engage in motivating or self-evaluative behaviors. These discrepancies can result in reductions to self-perceived social worth, depressive affect, and appearance-based rejection sensitivity (Forston & Stanton, 1992).



The aim of this chapter is to interpret the findings. This chapter begins with a discussion of the relationships between appearance invested self-schemas (SES and MS) and depressive affect. Next, the relationships between appearance invested self-schemas (SES and MS) and appearance-based rejection sensitivity are discussed. Theoretical and practical implications are then followed by recommendations for future research. The chapter closes with a conclusion.

### **Interpretation of Findings**

The purpose of this quantitative study was to investigate the psychological relationships between appearance-invested self-schema (SES and MS), appearance-based rejection sensitivity, and depressive affect among a population of women enrolled in the continuing education program at a Midwestern university. This study was designed to examine the influence of SES and MS on depressive affect and appearance-based rejection sensitivity. The independent variables were appearance-invested self-schemas (SES and MS), as measured by the Appearance Schemas Inventory (ASI-R). The ASI-R is a 14-item scale that assess individuals' core beliefs about the importance, meaning, and the effects of one's physical appearance in his or her life (Cash & Labarge, 1996). The dependent variables were depressive affect and appearance-based rejection sensitivity, as measured by the Center for Epidemiologic Studies Depression Scale (CES-D) and the Appearance Based Rejection Sensitivity Scale (Appearance-RS), respectively. The CES-D is a screening tool used to assess for depressive symptoms and affect, as defined by the DSM-5's definition of major depression. The Appearance R-S assesses "sensitivity to rejection based on one's physical attractiveness" (Park, 2007, p. 491).

Two multiple regression analyses were performed to examine the relationships between: (a) the independent variables of SES and MS, and the dependent variable of depressive affect; and (b) the independent variables of SES and MS, and the dependent variable of appearance-based rejection sensitivity. The relationships between the dependent variables were not assessed, nor were the relationships between SES and MS.

### **Appearance-Invested Self Schemas and Depressive Affect**

The first multiple regression analysis evaluated the relationships between the independent variables of appearance-invested self-schemas (SES and MS) and the dependent variable of depressive affect. Results of the first multiple regression indicated that SES was a significant predictor of depressive affect with a direct relationship, and MS was a significant predictor of depressive affect with an inverse relationship. That is, participants with higher SES scores tended to have higher depressive affect scores, and participants with higher MS scores tended to have lower depressive affect scores. Thus, the more participants defined themselves and their self-worth based on their physical appearance (SES), the more likely they were to experience symptoms of depression. However the more participants attended to their appearances through appearance-managing behaviors (MS), the *less* likely they were to experience symptoms of depression. This is discussed further in the theoretical implications.

Self-schema concerning the body reflects a person's concepts of what the body looks like, how it functions, and how it relates to one's perceptual, conceptual, and emotional experiences. This idea is referred to as *body schema* (Jahee & Lennon, 2003). Body image is one component of appearance-invested self-schema that includes the

following: (a) the perceptual experience of the body; (b) the conceptual experience of the body; and (c) the emotional attitude toward the body (Jahee & Lennon, 2003).

Previous studies have also found that SES and depression are linked. Partridge and Robertson (2011) found that individuals with high levels of SES are more likely to experience self-discrepancies that affect their sense of worth and self-esteem. Increases in such self-discrepancies are due to comparisons made between physical attributes of the self and the idealized self. Results from the first multiple regression indicated that the more a participant based her self-worth on her perceptions of her own physical appearance (SES), the more prone she was to symptoms of depression. The more participants attended to their appearances through appearance managing behaviors (MS), the *less* likely they were to experience symptoms of depression. SES has also been shown to be a predictor of body image dissatisfaction (Cash et al., 2004; Ledoux et al., 2010; Partridge & Robertson, 2011), depression, and anxiety (Partridge & Robertson, 2011). Existing research on depressive affect related to individuals' physical appearance is generally linked to body dissatisfaction and body image issues (Bessenoff, 2006; Cash et al., 1996, 2002; Cash, Melnyk et al., 2004; Ip & Jarry, 2008; Rogers, Paxon, & Charbrol, 2001). Thus, a later section of the paper addresses the possible role of body dissatisfaction on SES and MS.

Motivational salience (MS) refers to the degree to which one attends to and manages one's appearance (Ledoux et al., 2005) and is measured by the emphasis placed on maintaining and enhancing their appearances through grooming behaviors (Cash et al., 2004). In the current study, MS reduced depression among population of women enrolled

in the continuing education program at a Midwestern university. Prichard and Tiggemann (2011) reported that MS predicted eating behaviors and intentions to exercise, as well as other appearance-based behaviors such as tanning or getting manicures. The inverse relationship between MS and depression may also be related to self-efficacy. An individual with higher levels of self-efficacy feels empowered over his or her abilities to accomplish tasks and achieve goals (Bandura, 1977). Researchers have established the relationship between self-efficacy and low levels of depression. In a study on binge eating, depression, weight control, and self-efficacy, researchers found that depression was related to lower levels of self-efficacy regarding weight control and weight loss success. Of particular interest was that depression predicted less weight loss success in women (Linde et al., 2004). Thus, it is possible that the depression was linked to low levels of self-efficacy, which indicated participants' lack of belief in their abilities to lose weight, which then became a self-fulfilling prophecy that fueled the cycle of weight loss failure and depression.

### **Appearance-Invested Self Schemas and Appearance-Based Rejection Sensitivity**

A second multiple regression was used to evaluate the relationship between the independent variables of appearance-invested self-schemas (SES and MS) and the dependent variable of appearance-based rejection sensitivity. Results of the second regression indicated that SES and MS scores were both significant predictors of appearance-based rejection sensitivity. SES was directly related to the outcome variable, and MS was inversely related to the outcome variable. Participants with higher SES scores tended to have higher appearance-based rejection sensitivity scores, and

participants with higher MS scores tended to have lower appearance-based rejection sensitivity scores. In other words, the more participants defined themselves and their self-worth based on their physical appearance (SES), the greater the degree to which they experienced anxiety over anticipation of being rejected by others, based on their appearance (appearance-based rejection sensitivity). The more participants attended to their appearances through appearance managing behaviors (MS), the *less* likely they were to experience anxiety over anticipation of being rejected by others, based on their appearance (appearance-based rejection sensitivity).

The relationship between MS and appearance-based rejection sensitivity is important to expand upon. The inverse relationship between MS and appearance-based rejection sensitivity may also be related to self-efficacy. An individual with higher levels of self-efficacy feels empowered over his or her abilities to accomplish tasks and achieve goals (Bandura, 1977). Higher levels of MS, which describes the extent to which individuals attend to their appearances through appearance-managing behaviors (Jakatdar et al., 2006), were linked to lower levels of appearance-based rejection sensitivity. Thus, individuals who engaged in behaviors and practices that enhanced their physical appearance were less likely to experience rejection sensitivity based on physical appearance. The mechanism behind this relationship is particularly interesting. For example, Ekeland, Heian, and Hagen (2005) reported that the act of going to the gym or eating healthy to improve the size and shape of one's body had short-term beneficial effects on children and adolescent participants' self-esteem. Similarly, Appleton (2013) found that men and women who participated in regular exercise experienced improved

body image, even though their body weights and shapes remained the same. Possibly, grooming and body improvement behaviors helps individuals to feel empowered with their physical appearance, which improves self-image thus reducing anxiety of being rejected based on ones image.

#### Appearance Invested Self Schemas and Self Perceived Body Image

As mentioned previously, existing research on appearance-invested self-schemas highlighted the roles that body image and body dissatisfaction have in the development of depressive affect (Cash, 1996, 2002). According to Cash (1996, 2002) a better understanding of how self-schema shape body image can be assessed through a cognitive-behavioral perspective; a family of theories which posit that events and experiences activate schematic processing. Life events can lead to the development of negative self-perceptions of personal appearance. Contextual thoughts and emotions can be related to individuals adjusting behaviors based on these self-perceptions (Cash et al., 2004). As mentioned earlier, experiences influence the development of schema, which can become dysfunctional under intense rigidity (Patridge & Robertson, 2011). Thus, Cash et al. (2004) argued that understanding body image and body dissatisfaction is fundamental to understanding appearance-based schemas.

Girls with high levels of SES often demonstrate high levels of body dissatisfaction (Ip & Jarry, 2008). Research also indicates that body dissatisfaction often leads to depressive affect (Rodgers, Paxton, & Charbrol, 2010). Thus, past research indicated that body dissatisfaction may play a role in the predictive relationship between SES and depressive affect.

Dysfunctional attitudes towards one's body and appearance was so common in young women that Ricciardelli and McCabe (2004) considered it a normative discontent. However, a significantly negative body image was associated with low self-esteem, depression, anxiety, and somatic symptom disorder (Rodgers et al., 2010). Cash, Melnyk et al. (2004) posited that situations and environmental contexts could activate schematic processing of self-evaluative body image and information about an individual's appearance. Thus, body image dissatisfaction could be an underlying mechanism for the development of high appearance based rejection sensitivity as well, in that it may effect the degree to which an individual anticipates rejection due to their physical appearance, thus provoking some degree of anxiety (Park et al., 2009). In a study conducted by Park et al. (2010) individuals with high appearance rejection sensitivity experienced symptoms of even more extreme forms of body image disturbance, such as Body Dysmorphic Disorder. This preoccupation with self-perceived flaws were likely to lead to cosmetic surgery as a method of changing the individuals image to one that is more socially acceptable, thus reducing high levels of appearance rejection sensitivity by addressing intrapersonal appearance concerns with interpersonal appearance based rejection concerns (Park et al., 2010).

#### Theoretical Implications

Results of this study were supportive of the study's theoretical framework of self-discrepancy theory. Higgins (1987) explained that self-discrepancy theory was based on the idea that discrepancies between representations of the self are related to emotional vulnerabilities, such as sadness and agitation. Self-discrepancy theory suggested that both

depression and body dissatisfaction arise when a discrepancy between the ideal-self and the actual-self occurs, causing an individual some level of vulnerability or anxiety (Forston & Stanton, 1992; Higgins, 1987). This discrepancy can be perceived as failure and may affect self-perception and self-worth in a way that leads to further emotional deterioration, depression, and suicidal tendencies. When individuals experienced vulnerability or anxiety, they developed appearance-based rejection-sensitivity.

According to self-discrepancy theory, two perspectives on self-perception exist: the *own* and the *other* (Phillips & Silvia, 2005). The *own* represents an individual's personal standpoint, while the *other* is the view of another individual who has some form of significance to the self. The *own* self-discrepancy occurs between an individual and her perceptions of her ideal self; the *other* self-discrepancy occurs between an individual and her perceptions of what others believe her ideal self to be. Individuals who experience the self-discrepancy of the *other* believe they have failed to obtain the hopes or wishes that another has for them, and feel they have disappointed that individual as a result.

In light of the current research, self-discrepancy theory states that people become dissatisfied with their body images due to discrepancies between the ideal-self (how they want to look) and the actual-self (how they think they look) (Forston & Stanton, 1992). Life experiences can cause individuals to develop negative perceptions of their personal appearance. In turn, the negative thoughts and emotions that result can cause individuals to adjust their behaviors based on their self-perceptions (Cash et al., 2004).



An individual with a high level of SES is likely to experience depression from self-discrepancy if self-perceptions of her physical appearance are not aligned with what she believes to be her ideal. In the current study, the more participants defined themselves and their self-worth based on their physical appearance (SES), the more likely they were to experience depressive affect. Based on self-discrepancy theory, this indicates that individual with higher levels of SES are more likely to have discrepant views of their self-perceived ideal and actual selves.

Upon examination of MS, data from the current study indicated that the more participants attended to their appearances through appearance managing behaviors (MS), the *less* likely they were to experience anxiety over anticipation of being rejected by others, based on their appearance (appearance-based rejection sensitivity). In light of self-discrepancy theory, this finding suggested that there may be a relation between MS and an individual's discrepant views between her self-perceived ideal and actual selves. The act of engaging in grooming behaviors, it seems, may be related to an individual transforming their self-perceived selves into their actual selves. As mentioned earlier, simply engaging in behaviors with the intent of transforming one's physical appearance may improve an individual's perceptions of his or her body (Appleton, 2013; Ekeland et al., 2005).

Self-discrepancy theory can also be used to understand results from the second multiple regression analysis conducted for the current study. The second regression analysis explored the relationship that SES and MS had with appearance-based rejection sensitivity. Data analysis indicated that the more participants defined themselves and

their self-worth based on their physical appearance (SES), the greater the degree to which they experienced anxiety over anticipation of being rejected by others, based on their appearance (appearance-based rejection sensitivity). The more participants attended to their appearances through appearance managing behaviors (MS), the *less* likely they were to experience anxiety over anticipation of being rejected by others, based on their appearance (appearance-based rejection sensitivity). According to self-discrepancy theory, discrepant views between the actual and ideal self can result in feelings of vulnerability and anxiety. By definition, appearance-based rejection sensitivity described the degree to which an individual anticipates rejection due to their physical appearance, thus provoking some degree of anxiety (Park et al., 2009). Thus, the anxiety that an individual feels because of discrepant self-perceived views of her ideal and actual selves *is* appearance-based rejection sensitivity. Therefore, in the context of self-discrepancy theory, results of this study suggested that individuals with high levels of SES experience greater self-discrepant views, and individuals who exhibit high levels of MS are likely to experience less self-discrepant views.

#### Limitations of Study

A few limitations of the study must also be addressed. Several inherent limitations exist within the scope of a quantitative study. Foremost, the use of a quantitative method was able to address the research question and hypotheses, but was unable to adequately examine the depth and underlying perceptions and experiences, such as those related to appearance-invested self-schemas and how participants viewed the effect of this phenomenon on depressive affect or appearance-based rejection sensitivity. Thus, this

study traded this degree of depth for statistical certainty that any indicated associations did not occur by chance. In addition, participants may have misread or misunderstood one or more of the instruments or response categories. Participants may not have answered all the questions truthfully or responded positively to requests for information, which can affect validity. The chosen population consisted of adult, female college students participating in a continuing education program. This population was chosen because research indicated that women are more prone to depression and appearance-based rejection sensitivity than men (Morgan et al., 2012). By selecting a population more likely to be confronted with these issues, there was a stronger chance that any potential relationships between self-schema, depressive affect, and appearance-based rejection sensitivity would be detected, thus possibly effecting generalizability. The results can be representative of the population researched, however may not be representative of the overall general population.

#### Recommendations for Further Study

Findings from the current study can be used to suggest several recommendations for further study. First, researchers may explore how SES can be reduced. Such information would be particularly valuable to clinicians who work with individuals with eating disorders. If high SES is linked to depression, it is essential to determine ways that SES can be reduced to healthy levels in order to improve life quality and reduce depressive affect. Future researchers may investigate social, environmental, and biological factors that may predict high levels of SES, and how strategies for countering high SES may vary according to such variables.

Another topic of future research is an exploration of how MS may be used in a healthy manner to counter excessive SES. Similar to Appleton's (2013) research on how participation in regular exercise may improve body image (regardless of any actual changes to the body's shape or size) future researchers may explore how healthy appearance-management behaviors, such as healthy eating, exercise, or abstaining from alcohol or nicotine, may affect individuals' levels of SES.

Because the scope of the current research was limited to young women, future researchers may replicate this study on women in different age categories, or among male participants. It would also be interesting to see if sexual orientation plays any role in the relationships among appearance-invested self-schemas, appearance-based rejection sensitivity, and depressive affect. Researchers may also explore how SES and MS affects other behaviors, which may be related to depressive affect, such as academic and career success, perfectionism, and self-criticism.

Finally, future researchers may explore the relationship between the dependent variables of the current study (appearance-based rejection sensitivity and depressive affect) to expand upon findings from previous researchers, which indicate a connection between the two. For example, Park et al. (2009) reported that individuals with high levels of appearance-based rejection sensitivity were more likely to compare their physical attractiveness to others and experience depressive affect when doing so. In another study, Park et al. (2010) found that individuals with high levels of appearance-based rejection sensitivity reported feelings of rejection and loneliness when asked to list negative the aspects of their appearance.

### Implications for Positive Social Change

The potential implications for social change from these findings are significant, due to the sheer number of women who struggle with depression and SES. In order to improve life quality among these individuals and reduce the personal, emotional, and financial costs associated with depressive affect, researchers and clinicians must understand the role of SES and MS. Depressive affect is common among adolescents. In fact, the most severe form of depressive affect, major depressive disorder, is the most prevalent psychiatric disorder among teens around the world (Blom, Bech, Hogberg, Larsson, & Serlachius, 2012). Thus, the social change implications related to findings from this study are the directions findings may offer to researchers and clinicians in targeting SES and MS in the treatment of depressive affect. Such recommendations for action are described below.

Results from this study may also be helpful for understanding the relationship between SES and appearance-based rejection sensitivity. Research indicated that individuals who experienced appearance-based rejection sensitivity were prone to anxiety over their appearance (Bowker, Thomas, Spencer, & Park, 2012). Understanding the connection may allow clinicians to target the causes of such anxiety, which may be related to high levels of SES. Thus, providing patients with behavioral and other therapeutic interventions to address SES may also impact related anxiety. Similar to depressive affect, anxiety affects a significant number of young women, especially as related to their physical appearance (Bardone-Cone, Brownstone, Higgins, Fitzsimmons-Craft, & Harney, 2013). Thus, social change implications are significant for young

women who suffer from appearance-based anxiety, the clinicians who treat them, the parties responsible for paying for treatment, and society in general.

Findings from the current study also have useful, practical implications for clinicians. Understanding the relationships between SES, MS, appearance-based rejection sensitivity, and depressive affect can help clinicians determine the best treatment strategies for individuals who present with depressive affect, which may be related to appearance-based self-perceptions. For example, by understanding that high levels of SES are linked to depressive affect, clinicians may investigate the causes of SES and recommend behavioral interventions to target the predictors of SES. Similarly, clinicians may assess an individual's SES and MS, and recommend healthy behavioral practices related to appearance management (such as a healthy diet and regular exercise) as it relates to self-efficacy and depressive affect. Finally, clinicians could address patients' appearance-based rejection sensitivity through behavioral interventions, which may then result in reductions to SES and improvements to healthy MS-related behaviors.

#### Conclusion

The purpose of this quantitative study was to investigate the psychological relationships between appearance-invested self-schema (SES and MS), appearance-based rejection sensitivity, and depressive affect among a population of women enrolled in the continuing education program at a Midwestern university. Specifically, I explored the influence of SES and MS on depressive affect and appearance-based rejection sensitivity.

There were two main findings that came out of this investigation: (a) SES was a significant predictor of depressive affect (with a direct relationship), and MS was a

significant predictor of depressive affect (with an inverse relationship); and (b) both SES and MS scores were significant predictors of appearance-based rejection sensitivity, such that SES was directly related to the outcome variable and MS was inversely related to the outcome variable. Thus, the more participants defined themselves and their self-worth based on their physical appearance (SES), the more likely they were to experience symptoms of depression and anxiety over being rejected. The more participants attended to their appearances through appearance-managing behaviors (MS), the *less* likely they were to experience symptoms of depression and anxiety over being rejected.

These findings may offer a direction to researchers and clinicians in targeting SES and MS in the treatment of depressive affect and appearance based rejection sensitivity. Understanding the clinical implications for individuals experiencing high levels of SES, depressive affect, and appearance based rejection sensitivity, may result in the implementation of treatment focused on increasing MS while decreasing SES.

My study supported previous research findings that found SES to be a predictor of body image dissatisfaction (Cash et al., 2004; Ledoux et al., 2010; Partridge & Robertson, 2011) and that body image dissatisfaction has been linked to depressive affect and appearance based rejection sensitivity (Bessenoff, 2006; Cash et al., 1996, 2002; Cash, Melnyk et al., 2004; Ip & Jarry, 2008; Rogers, Paxon, & Charbol, 2001). One suggestion for future studies would be to study the relationship between depressive affect and appearance based rejection sensitivity. Another suggestion would be expand the current studies population to include the male population in order to investigate any sex differences. Lastly, future research could study the adolescent population to examine the

psychological relationships between SES, MS, depressive affect and appearance based rejection sensitivity, in order to provide early interventions if needed. Future studies may conclude that there is a relationship between depressive affect and appearance based rejection sensitivity, and that this differs by sex, as well as the adolescent population.



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## Appendix A: Participant Solicitation Letter

Study Title: Self-Evaluative Salience and Motivational Salience as Predictors of Depressive Affect, and Appearance-Based Rejection Sensitivity

Mandana Toosi  
Mandana.toosi@waldenu.edu  
773-600-8258

**Description of study:** Mandana Toosi is a doctoral student at Walden University and is conducting research to satisfy criteria for a Doctor of Philosophy Degree. The purpose of this study is to learn of your opinions about personal appearance and how it influences other people.

**Eligibility:** Women between the ages of 19 and 60 are eligible for the study.

If you give consent to participate, you will be asked to complete an online questionnaire. The questionnaire will be comprised of 60 questions and will take approximately 20 - 30 minutes to complete. The survey will be administered electronically, and you may take as many breaks as you like.

**Benefits/Risks to the Participants:** There may be no direct benefit to the participant; however, the responses provided will be valuable to the researcher, organizational leaders, and employees. All survey responses will be kept anonymous. No names or otherwise identifying data will be collected. Participation in this study is NOT a requirement for any current or future courses, and instructors will have no knowledge of who does or does not participate. If you have concerns regarding the risk of participation, please contact the investigators or the Institutional Review Board to discuss your concerns. Contact information can be found at the head of this form.

**Costs/Payments to the Participant:** There is no cost associated with participation in the study. All participation is completely voluntary. There is also no monetary compensation for participation in the study.

**Confidentiality:** Information obtained in this study will be kept confidential unless disclosure is required by law. All data will be secured on a password protected server for up to five years. Following the research's conclusion, and five-year data retention period, data will be disposed of properly. No identifying information will be used in any portion of analysis or data reporting. All participants have the right to withdraw from the study at any point.

## Appendix B: Center for Epidemiologic Scale

The Center for Epidemiologic Studies Depression Scale (CES-D) is available in the public domain and is accessible at [cesd-r.com](http://cesd-r.com)

Center for Epidemiologic Studies Depression Scale (CES-D), NIMH

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually don't bother me.	— ...	— ...	— ...	— ...
2. I did not feel like eating; my appetite was poor.	— ...	— ...	— ...	— ...
3. I felt that I could not shake off the blues even with help from my family or friends.	— ...	— ...	— ...	— ...
4. I felt I was just as good as other people.	— ...	— ...	— ...	— ...
5. I had trouble keeping my mind on what I was doing.	— ...	— ...	— ...	— ...
6. I felt depressed.				
7. I felt that everything I did was	— ...	— ...	— ...	— ...

an effort.

- |  |                          |       |       |       |
|--|--------------------------|-------|-------|-------|
| 8. I felt hopeful about the future.      | —                        | —     | —     | —     |
| 9. I thought my life had been a failure. | . . .                    | . . . | . . . | . . . |
| 10. I felt fearful.                      | <input type="checkbox"/> | . . . | . . . | . . . |
| 11. My sleep was restless.               | —                        | —     | —     | —     |
| 12. I was happy.                         | . . .                    | . . . | . . . | . . . |
| 13. I talked less than usual.            | —                        | —     | —     | —     |
| 14. I felt lonely.                       | . . .                    | . . . | . . . | . . . |
| 15. People were unfriendly.              | —                        | —     | —     | —     |
| 16. I enjoyed life.                      | . . .                    | . . . | . . . | . . . |
| 17. I had crying spells.                 | —                        | —     | —     | —     |
| 18. I felt sad.                          | . . .                    | . . . | . . . | . . . |
| 19. I felt that people dislike me.       | —                        | —     | —     | —     |
| 20. I could not get “going.”             | . . .                    | . . . | . . . | . . . |

## Appendix C: Appearance Schemas Inventory

Beliefs about Appearance Questionnaire  
(ASI-R Short Form)

The statements below are beliefs that people may or may not have about their physical appearance and its influence on life. Decide on the extent to which you personally disagree or agree with each statement and enter a number from 1 to 5 in the space on the left. There are no right or wrong answers. Just be truthful about your personal beliefs.

1	2	3	4	5
Strongly Disagree	Mostly Disagree	Neither Agree or Disagree	Mostly Agree	Strongly Agree

- \_\_\_\_\_ 1. I spend little time on my physical appearance.
- \_\_\_\_\_ 2. When I see good-looking people, I wonder about how my own looks measure up.
- \_\_\_\_\_ 3. I try to be as physically attractive as I can be.
- \_\_\_\_\_ 4. I have never paid much attention to what I look like.
- \_\_\_\_\_ 5. I seldom compare my appearance to that of other people I see.
- \_\_\_\_\_ 6. I often check my appearance in a mirror just to make sure I look okay.
- \_\_\_\_\_ 7. When something makes me feel good or bad about my looks, I tend to dwell on it.
- \_\_\_\_\_ 8. If I like how I look on a given day, it's easy to feel happy about other things.
- \_\_\_\_\_ 9. If somebody had a negative reaction to what I look like, it wouldn't bother me.
- \_\_\_\_\_ 10. When it comes to my physical appearance, I have high standards.
- \_\_\_\_\_ 11. My physical appearance has had little influence on my life.

1	2	3	4	5
Strongly Disagree	Mostly Disagree	Neither Agree or Disagree	Mostly Agree	Strongly Agree

- \_\_\_\_\_ 12. Dressing well is not a priority for me.
- \_\_\_\_\_ 13. When I meet people for the first time, I wonder what they think about how I look.
- \_\_\_\_\_ 14. In my everyday life, lots of things happen that make me think about what I look like.
- \_\_\_\_\_ 15. If I dislike how I look on a given day, it's hard to feel happy about other things.
- \_\_\_\_\_ 16. I fantasize about what it would be like to be better looking than I am.
- \_\_\_\_\_ 17. Before going out, I make sure that I look as good as I possibly can.
- \_\_\_\_\_ 18. What I look like is an important part of who I am.
- \_\_\_\_\_ 19. By controlling my appearance, I can control many of the social and emotional events in my life.
- \_\_\_\_\_ 20. My appearance is responsible for much of what's happened to me in my life.

(ASI-R □ Thomas F. Cash, Ph.D., 2003)

## Appendix D: Permission to Use Appearance Schemas Inventory

**Subject : RE: permission to use ASI-R**

**Date :** Fri, Aug 23, 2013 09:41 PM CDT

**From :**

"Dr.

Tom

Cash"

<tom\_cas

h@comc

ast.net>

**To :** "Mandana Toosi" <mandana.toosi@waldenu.edu>

Dear Mandana Toosi,

I am confirming your purchase of my body image assessment (ASI-R) which approves your license to use the measure in your research (up to 1000 administrations over a two-year period).

Best wishes in your research!

Thomas F. Cash, PhD

Body Images Research Consulting

Naples , Florida

www.body-images.com

**From:** Mandana Toosi [mailto:mandana.toosi@waldenu.edu]

**Sent:** Friday, August 23, 2013 8:13 PM

**To:** Cash, Thomas F.

**Subject:** permission to use ASI-R

Dear Dr. Cash,

My name is Mandana Toosi and I have completed my doctoral coursework and internship from Walden University. I have been working on my dissertation that is focused on the relation between appearance schemas with appearance based fear rejection and depressive affect. I have located and purchased the ASI-R but am of course seeking your permission to use the questionnaire in my research. I would greatly appreciate being able to do so. I would, provide all the appropriate acknowledgments and results. I look forward to your response and that you for your consideration in the important matter.

Sincerely,

Mandana Toosi, MA, LCPC

A00068389

PhD Clinical Psychology Candidate

Central Standard Time



very unlikely  
1                    2                    3                    4                    5                    6                    very likely

You post a photo of yourself on an internet dating service.

How concerned or anxious would you be that people might not contact you because of the way you looked? (how physically attractive/unattractive you looked).

very unconcerned  
1                    2                    3                    4                    5                    6                    very concerned  
I would not expect people to contact me because of the way I looked.

very unlikely  
1                    2                    3                    4                    5                    6                    very likely  
During dinner at a restaurant, you notice your date looking at an attractive person across the room.

How concerned or anxious would you be that your date would be less interested in you because of the way you looked?

very unconcerned  
1                    2                    3                    4                    5                    6                    very concerned

I would expect that my date would be less interested in me because of the way I looked.

very unlikely  
1                    2                    3                    4                    5                    6                    very likely

You met someone at a coffee shop and gave them your phone number. Three days have passed and you still have not heard anything.

How concerned or anxious would you be that they did not call you because of your physical appearance?

very unconcerned  
1                    2                    3                    4                    5                    6                    very concerned

I would expect that he/she would not call me because of the way I looked.

very unlikely  
1                    2                    3                    4                    5                    6                    very likely



You are at a dance club and all of your friends have been asked to dance except for you.

How concerned or anxious would you be that no one wanted to dance with you because of the way you looked?

very unconcerned  
1                      2                      3                      4                      5                      6                      very concerned

I would expect that no one would want to dance with me because of the way I looked.

very unlikely  
1                      2                      3                      4                      5                      6                      very likely

You are set up on a blind date. The date goes well and you like the person, but he/she has not called you for several days.

How concerned or anxious would you be that your date did not call you because of the way you looked?

very unconcerned  
1                      2                      3                      4                      5                      6                      very concerned

I would expect that my date would not call me because of the way I looked.

very unconcerned  
1                      2                      3                      4                      5                      6                      very concerned

You are taking dance lessons that involve dancing with partners. When the instructor tells everyone to find a partner, no one chooses you.

How concerned or anxious would you be that you were not chosen to dance because of the way you looked?

very unconcerned  
1                      2                      3                      4                      5                      6                      very concerned

I would expect to not be chosen to dance because of the way I looked.

very unlikely  
1                      2                      3                      4                      5                      6                      very likely

