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ABSTRACT

CORRELATES OF BODY IMAGE OF UNDERGRADUATE  
FEMALES ATTENDING ANDREWS UNIVERSITY

by

Jennifer L. Dabros

Chair: Nancy J. Carbonell

## ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: CORRELATES OF BODY IMAGE OF UNDERGRADUATE FEMALES  
ATTENDING ANDREWS UNIVERSITY

Name of researcher: Jennifer L. Dabros

Name and degree of faculty chair: Nancy J. Carbonell, Ph.D.

Date completed: June 2014

### Problem

Literature on the relationship between ethnic identity and body image has been scarce, focusing almost entirely on the Asian and/or Hispanic population. The purpose of this study is to examine the influence that ethnic identity has on the body image of undergraduate females.

### Method

In the present study, I explored the extent to which body image is related to ethnicity in a diverse sample of 345 undergraduate females (43.5% Caucasian American, 17.4% African American, 9.3% West Indian/Caribbean, 14.8% Hispanic American, 12.5%, Asian American, & 2.6% Multi-ethnic) from a Seventh-day Adventist university.

Possible correlates of body dissatisfaction such as ethnic identity, religious commitment, sociocultural pressure, and internalization of the thinness ideal were also explored.

### Results

Results of this study indicated that low ratings on Sociocultural Pressure and Internalization of the Thinness Ideal were related to positive body image perceptions. As a whole, undergraduate females in this study presented with a positive body image. Specifically, the women expressed positive feelings about their bodies, had lower preoccupation with their weight, classified their weight as “normal,” and were moderately satisfied with all areas of their body. In terms of ethnic identity, the females in this study had low interest and little awareness of their own ethnicity. As seen in previous research, the only significant correlates of body image that emerged in this study were sociocultural pressure and internalization of the thinness ideal.

### Conclusions

Body image concerns of undergraduate females may not be as prevalent as once thought. Females are displaying greater body satisfaction than in the recent past. Differences in body dissatisfaction among the Seventh-day Adventist sample including various ethnic groups are becoming non-existent. This may be due to the Seventh-day Adventist culture serving as a protective factor against body image dissatisfaction. Another possible explanation is the increased emphasis on social media.

Andrews University

School of Education

CORRELATES OF BODY IMAGE OF UNDERGRADUATE  
FEMALES ATTENDING ANDREWS UNIVERSITY

A Dissertation

Presented in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy

by

Jennifer L. Dabros

June 2014

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CORRELATES OF BODY IMAGE OF UNDERGRADUATE  
FEMALES ATTENDING ANDREWS UNIVERSITY

A dissertation  
presented in partial fulfillment  
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Doctor of Philosophy

by

Jennifer L. Dabros

APPROVAL BY THE COMMITTEE:

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Date approved





To my father, Casimir F. Dabros (3/10/1944–3/10/2013),  
and my mother, Sophia M. Dabros

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## CHAPTER 1

### INTRODUCTION

Beauty is often based on standards set forth by society. In Western society, beauty is based, it would seem, on unrealistic and unattainable standards. In order to be considered beautiful, a woman must possess the following characteristics: extreme thinness, long flowing hair, flawless skin, and large breasts. These characteristics, taken together, are often termed the Western Standard of Beauty or the Thinness Ideal, and they reportedly contribute to body image dissatisfaction among females (Groesz, Levine, & Murnen, 2002).

Body image dissatisfaction affects females regardless of ethnicity, and it is relatively persistent throughout life. In general, body dissatisfaction is defined as disappointment with physical appearance, particularly size, shape, and aesthetics (Hoyt & Kogan, 2002). Studies have shown that females as young as 5 years old (Krahnstoever Davison, Markey, & Birch, 2003) and as old as 92 (Hurd Clarke, 2001) are dissatisfied with their bodies. It has been reported that 50% of pre-adolescent girls were dissatisfied with their bodies and 45% wanted to be thinner (Skemp-Arlt, Rees, Mikat, & Seebach, 2006).

While this trend appears to be consistent across age ranges, however, research suggests increased prevalence of body image dissatisfaction among college-aged women (Delene & Bragowicz, 1990; Forrest & Stuhldreher, 2007). Forrest and Stuhldreher



(2007) found that 68% of undergraduate females were dissatisfied with their bodies; while Delene and Bragowicz (1990) found the percentage to be closer to 90%. Other research suggests that body image dissatisfaction has been shown to affect approximately 50% of the general female population (Cash & Henry, 1995; Skemp-Arlt et al., 2006; S. Thompson, Corwin, Rogan, & Sargent, 1999) with a marked increase in prevalence during college (Delene & Bragowicz, 1990; Forrest & Stuhldreher, 2007). Since there is such a profound increase in body dissatisfaction during college, it is important to examine the factors and correlates that contribute to this discontent.

Researchers have identified several determinants that contribute to body image dissatisfaction, the strongest being socio-cultural factors (Anderson & DiDomenico, 1992; Silverstein, Perdue, Peterson, & Kelly, 1986). These include pressure from family, peers, and the media to conform to the beauty standards set forth by Western society (Furnan & Thompson, 2002; Gerner & Wilson, 2005; Groesz et al., 2002; Kichler & Crowther, 2001; Phares, Steinberg, & Thompson, 2004; Tiggemann & Slater, 2004). Family members often reinforce the thinness ideal through negative communication (i.e., teasing) and by modeling or demonstrating their concerns about body image and eating attitudes and behaviors (Kichler & Crowther, 2001; Phares et al., 2004). Peers reinforce the thinness ideal through feedback about appearance as well as teasing (Groesz et al., 2002; Hargreaves & Tiggemann, 2003; McCabe & Ricciardelli, 2001; Mukai, 1996; Tiggemann & Slater, 2004). The media, recognized as the greatest contributing influence to body image unhappiness (Groesz et al., 2002; Hargreaves & Tiggemann, 2003; Tiggemann & Slater, 2004), conveys the message that to be beautiful, one must be

extremely thin (Groesz et al., 2002), via television, movies, and magazines. Women often internalize this message leading to body image dissatisfaction.

Although socio-cultural factors appear to be the strongest influence of body dissatisfaction, researchers have recently begun to focus on other contributing factors such as religion and self-esteem. The few studies conducted on religion and body image dissatisfaction have shown that individuals who possess strong religious beliefs are less dissatisfied with their bodies when compared to individuals with little or no religious convictions (Gluck, 2000; Kim, 2004; Weinberger-Litman, 2008). Studies linking body image dissatisfaction and self-esteem suggest that individuals who are dissatisfied with their bodies appear to have lower self-esteem than individuals who are satisfied with their body image (Fisher, Schneider, Pegler, & Napolitano, 1991; Garner & Garfinkel, 1981; Ricciardelli & McCabe, 2001). Both religion and self-esteem thus also appear to be contributing factors to body image dissatisfaction.

Over the past two decades, research on the influence of one's ethnicity on body image dissatisfaction has been prominent in the literature. It has been suggested that ethnicity can be a contributing factor to body image dissatisfaction (Altabe, 1998; Henriques, Calhoun, & Cann, 1996). Studies conducted on the correlation between ethnicity and body image dissatisfaction have produced conflicting results. Some research suggests that Caucasian females display more body dissatisfaction than other ethnicities, particularly when compared to African Americans (Altabe, 1998; S. Harris, 1994; Henriques et al., 1996; Patel & Gray, 2001; Turnage, 2004), Hispanic Americans (Demarest & Allen, 2000), and Asian Americans (Mintz & Kashubeck, 1999). By contrast, other studies found that Caucasian females displayed less body image

dissatisfaction when compared to African Americans (Rucker & Cash, 1992; Striegel-Moore et al., 1996), Asians/Asian Americans, Hispanic Americans, and Native Americans (Robinson et al., 1996). Other researchers found no correlation between body image dissatisfaction and ethnicity (Lake, Staiger, & Glowinski, 2000; Mukai, Kambara, & Sasaki, 1998). Although numerous studies have been conducted on body dissatisfaction and ethnicity, no definitive answers have been provided as to whether or not ethnicity is a contributing factor to body image dissatisfaction.

Another contributing factor of body image dissatisfaction new to the field of research is ethnic identity, which is the focus of this study. Ethnic identity is defined as “one’s sense of belonging to an ethnic group and the part of one’s thinking, perception, feelings and behavior that is due to ethnic group membership” (Rotheram & Phinney, 1987, p. 13). Simply put, ethnic identity refers to the degree to which individuals have explored their ethnicity, are clear about what their ethnic group membership means to them, and the extent to which they identify with their ethnic group (Phinney, 1996). Ethnic identity can be expressed through behavior (cultural activities, language and food preference), attitudes, values, and sense of affiliation with the ethnic group (ethnic pride) (Ying & Lee, 1999). Additionally, ethnic identity can influence goals, regulate behavior, and serve as a reference point for self-evaluation (S. Tsai, 2006). Ethnic identity influences many aspects of life, but how does it affect body image dissatisfaction?

The relationship between body image and ethnic identity is virtually unknown due to limited research and conflicting results. Research on ethnic identity and body dissatisfaction has focused primarily on the Asian population. Studies focusing on the Asian American population have shown that stronger ethnic identity may be associated

with higher body image dissatisfaction (Lake et al., 2000; G. Tsai, Curbow, & Heinberg, 2003), while others have shown no relationship between the variables (Phan & Tylka, 2006). It is unknown whether these results are consistent throughout the Asian American community or if similar results would be found in other ethnic groups such as African Americans, Caucasian Americans, Hispanic Americans, and West Indian/Caribbeans. More research is needed that focuses on the ethnic identity of various ethnic groups and the possible impact it has on body image dissatisfaction.

### **Statement of Problem**

Research on body image dissatisfaction and its possible correlates has been plentiful; however, little attention has been given to body image and how it correlates with ethnic identity. Ethnic identity refers to a sense of belonging or attachment to one's ethnic group, cultural heritage, and values (Sodowsky, Kwan, & Pannu, 1995). Studies on ethnic identity and body image dissatisfaction have been limited, focused mainly on the Asian American population and have produced conflicting results. What is more, the literature in this area of study lacks information on the impact that ethnic identity has on the body dissatisfaction of other ethnicities, including African Americans, Caucasian Americans, Hispanic Americans, and West Indian/Caribbeans. More research is needed in order to ascertain if ethnic identity is correlated with body dissatisfaction. It is also important to examine whether the ethnic identity of Caucasian Americans, African Americans, Asians/Asian Americans, Hispanic Americans, and West Indian/Caribbeans affects body image dissatisfaction to the same extent or if one ethnic group is affected to a greater extent.

There is also a lack of research that examines the correlation between ethnicity and body dissatisfaction. Ethnicity is defined as identity with or membership in a particular racial, national, or cultural group (“Ethnicity,” 2006). Although there has been an abundance of research on body dissatisfaction and ethnicity, some ethnic groups including Asian Americans, Hispanic Americans, and West Indian/Caribbeans have gone largely unrepresented. The literature has primarily focused on comparisons between African Americans and Caucasian Americans with little regard for other ethnic groups. Due to the great diversity in the United States, it is important to examine not only the body image dissatisfaction of African Americans, Caucasians Americans, Asians/Asian Americans, West Indian/Caribbeans, and Hispanic Americans but also whether socio-cultural factors such as pressure from family, peers, and the media to conform to the standard of beauty set forth by American society affect each group to the same extent.

### **Purpose of Study**

The purpose of this study was to examine perceived body image and ethnic identity and their relationships to ethnicity, generational distances, internalization of thinness ideal, sociocultural pressure, and religious commitment among undergraduate female students at Andrews University, a small parochial institution in Southwestern Michigan.

### **Theoretical Framework**

This study is based on three theoretical frameworks that explain the development of body image satisfaction. These include the ethnocultural perspective, sociocultural theory, and social comparison theory.

### Ethnocultural Perspective

The relationship between ethnic identity and body image dissatisfaction can be explained by the ethnocultural perspective (Semaj, 1985). This perspective states that ethnic identity or ethnocultural identity develops through relationships with family, peers, and the ethnic community. An individual becomes aware of her ethnic identity through expectations set forth by her ethnic group. Body dissatisfaction occurs when learned cultural behaviors and interactions conflict with messages from the mainstream culture (Semaj, 1985). As females struggle to fit into their environment, they may oscillate between accepting and rejecting mainstream ideals regarding beauty and achievement (D. Harris & Kuba, 1997). For example, African American culture views a full-figured woman as beautiful (Demarest & Allen, 2000; Lacey-Godfrey, 2007; J. Thompson, 1992); however, Western society stresses the importance of extreme thinness in order to achieve popularity and success (Groesz et al., 2002). These conflicting messages are often the basis for body dissatisfaction among females from different ethnic groups (Harris & Kuba, 1997). In sum, from the ethnocultural perspective, body dissatisfaction occurs when cultural messages about beauty conflict with messages from mainstream society.

### Sociocultural Theory

Another common explanation for the development of body image dissatisfaction is sociocultural theory (Baratelli, 2008; Levine & Harrison, 2004). According to sociocultural theory, body image dissatisfaction occurs as the result of a “thin ideal” and/or other unattainable standards of beauty that are disseminated by society (Morrison, Kalin, & Morrison, 2004). These standards of beauty are transmitted and reinforced by

family, peers, and the media (Morrison et al., 2004; Striegel-Moore, Silberstein, & Rodin, 1986). Due to the unrealistic and often unattainable beauty standards set forth by society, individuals begin to dislike aspects of their bodies, which eventually develops into body image dissatisfaction.

Sociocultural theory can be used not only to explain the body image dissatisfaction of Caucasians but other ethnic groups as well. To be considered beautiful, a woman must be extremely thin, have long flowing hair, large breasts, and a flawless white complexion (Groesz et al., 2002). Individuals in ethnic groups such as African American, Hispanic American, and Asian American may experience sociocultural pressures to achieve a White beauty ideal to a greater extent due to the unrealistic standards set forth by society. Literature has shown that when women of color judge themselves based on White beauty standards (thinness ideal), they become at risk for developing body image dissatisfaction (Baratelli, 2008; Root, 1990). This is largely because these beauty ideals are even more unattainable for women of color. In sum, body image dissatisfaction occurs when individuals experience pressure from the media, family, and peers to obtain the beauty ideals set forth by society.

### Social Comparison Theory

And lastly, the third foundational theory underpinning this study is the explanation for the development of body image dissatisfaction as explained by Social Comparison Theory (Festinger, 1954). According to this theory, individuals are driven towards comparisons with others as a way to more accurately appraise themselves. It also has been found that individuals tend to lean toward making comparisons of themselves

with similar or relevant others while discounting comparisons with dissimilar or irrelevant others (Strahan, Wilson, Cressman, & Buote, 2006).

Being that current literature suggests that, in Western culture, individuals tend to identify models, actresses, and others in the media as similar or relevant others (Heinberg & Thompson, 1995), such models and actresses become powerful examples of the thinness ideal. Since women appear to have a tendency to compare themselves to these images, images that reflect this standard should not be dismissed or seen as irrelevant or dissimilar. Thus females will be unable to achieve this unattainable standard resulting in body image dissatisfaction (Strahan et al., 2006). Further information on the Social Comparison Theory will be presented in Chapter 2.

In summary, body image dissatisfaction can be explained by the Ethnocultural Perspective, Sociocultural Theory, and Social Comparison Theory. It is my belief that these three theories work in tandem in the development of body dissatisfaction. Women are being bombarded by conflicting messages from their culture (Ethnocultural Perspective), their family, peers, and the media (Sociocultural Theory), and themselves (Social Comparison Theory) on their physical appearance. In order to be accepted, women try to attain the beauty standards set forth by society and their culture. Due to conflicting messages, females are confused about which beauty ideals to strive for, which results in body image dissatisfaction. These three theories thus form the theoretical foundation of this study.

### **Research Questions**

In the context of the purpose of the study and the conceptual framework just presented, this study sought to examine the following research questions:



1. To what extent is body image related to ethnicity, where body image is measured by Appearance Evaluation subscale, Body Satisfaction subscale, Overweight Preoccupation, and Self-Classified Weight subscale?
2. To what extent is ethnic identity related to ethnicity?
3. To what extent is ethnic identity related to generational distance from original land of origin?
4. To what extent is body image (as measured by Appearance Evaluation subscale, Body Satisfaction subscale, Overweight Preoccupation subscale, and Self-Classified Weight subscale) related to ethnic identity (as measured by the Ethnic Identity Scale), internalization of the thinness ideal (as measured by the Internalization-General subscale and Internalization-Athletic subscale), sociocultural pressure (as measured by the Sociocultural Pressures Scale), and religious commitment (as measured by the Religious Commitment Inventory-10)?

### **Hypotheses**

The following four hypotheses were derived from the research questions:

Hypothesis 1: Caucasian American females will have greater body dissatisfaction, be more dissatisfied with areas of the body, be more preoccupied with their weight, and be more likely to classify themselves as overweight compared to African American, West Indian/Caribbean American, Hispanic American, and Asian American females.

Hypothesis 2: Caucasian American females will display less ethnic identity compared to African American, West Indian/Caribbean American, Hispanic American, and Asian American females.

Hypothesis 3: With each increasing generation spent in the United States, the less ethnic identity will be displayed regardless of ethnicity.

Hypothesis 4: Regardless of ethnicity, individuals who have a strong ethnic identity will display greater body satisfaction, be more satisfied with areas of the body, be less preoccupied with their weight, classify themselves as normal weight, internalize the thinness ideal to a lesser extent, feel less sociocultural pressure to conform to the thinness ideal, and have a stronger religious commitment compared to individuals who have a weak ethnic identity.

### **Significance of the Study**

This study will provide information about factors that contribute to body image dissatisfaction as well as how these factors affect specific ethnic groups allowing for better interventions and treatment planning among mental health professionals and physicians.

### **Definitions**

*Acculturation*—The process by which minority individuals integrate behaviors and beliefs of the majority culture into their own cultural views and practices (Berry, 1980).

*Asian*—Refers to individuals of Asian descent, including Asian Americans, and international students from the continent of Asia.

*Body Dissatisfaction*—Is disappointment with physical appearance, particularly size, shape, and aesthetics (Hoyt & Kogan, 2002).

*Body Image* —A subjective mental representation of one's physical appearance that is constructed from self-observation, reactions from others, and a complex

interaction between emotions, memories, experiences, and attitudes that are both conscious and unconscious (J. Thompson, 1990).

*Body Satisfaction*—Satisfaction with an aspect of the body; usually scales define which sites are rated (e.g., hips, thighs, breasts, hair, etc.) (Thompson, 1990).

*Black* —Term used interchangeably in the research as a broad term to refer to African Americans, African Caribbeans, and those of African descent.

*Ethnicity*—Identity with or membership in a particular racial, national, or cultural group (“Ethnicity,” 2006).

*Ethnic Identity*—An individual’s sense of self as a member of an ethnic group and the attitudes and behaviors associated with that sense (Phinney & Alipuria, 1990).

*Hispanic-American*—Used interchangeably with the term *Latina* to describe individuals with origins in South America, Central America, and Mexico.

*Internalization of the Thinness Ideal* —The extent to which an individual cognitively “buys into” socially defined ideals of attractiveness and engages in behaviors designed to produce an approximation of those ideals (J. Thompson & Stice, 2001).

*Religious Commitment* —The degree to which a person adheres to his or her religious values, beliefs, and practices and uses them in daily living (Worthington et al., 2003).

*Silhouette Drawings* —Figures that range from underweight to overweight that are used to measure body image. Individuals are asked to choose which figure looks most like them, and which figure would be their ideal body type.

*Socioeconomic Status (SES)*—An individual’s or group’s position within a hierarchical social structure; depends on a combination of variables, including

occupation, education, income, wealth and place of residence. It is often used as a means of predicting behavior.

*Thinness Ideal*—A standard of beauty in the Western culture that emphasizes extreme thinness, long flowing hair, flawless skin and well-developed breasts.

*White* —Used interchangeably in the research as a broad term for European American and Caucasian individuals.

### **Limitations**

The main limitation of this study is generalizability. Results are limited to undergraduate females in this sample. Results are not generalizable to all undergraduate females.

Despite this limitation, this study will provide important insight into body image dissatisfaction and its possible correlates including ethnic identity, religious commitment, sociocultural pressure, and internalization of the thinness ideal.

### **Delimitations**

The study was limited to undergraduate females at Andrews University who participated in this study. Andrews University is a private Seventh-day Adventist university located in Berrien Springs, Michigan.

### **Organization of the Study**

Five chapters are contained in this study. Chapter 1 contains an introduction of the research project, statement of the problem, purpose of the study, significance of the study, research questions, research hypotheses, theoretical framework, definition of terms, limitations of the study, and delimitations of the study. Chapter 2 presents a review of the literature that focuses on ethnic identity, religious commitment, internalization of

the thinness ideal, and the body image of Caucasian, African American, Asian, West Indian/Caribbean and Hispanic females. Chapter 3 focuses on the methodology of this study including the research problem, population and sample, variables, instrumentation, data collection, and methods of analysis. Chapter 4 contains the data and analysis. Chapter 5 summarizes and discusses the results and conclusions found in this study, provides recommendations for future research, and identifies implications for practice for mental health professionals and physicians.

## CHAPTER 2

### REVIEW OF LITERATURE

The literature presented in this review is drawn from the following EBSCO databases: Academic Search Premier, MasterFILE Premier, PsycINFO, and PsycARTICLES. Keywords used either individually or in conjunction include: body image, satisfaction, dissatisfaction, women, female, gender, ethnicity, ethnic identity, African Americans, Asians, Latinas, Caucasians, Black, White, Hispanic, European, self-image, self-concept, self-esteem, sociocultural, culture, acculturation, media, and images.

#### **Introduction**

Throughout history, body image dissatisfaction was predominately viewed through the eyes of the dominant culture; however, in recent years research has shown that other cultures have been impacted as well (Holmqvist & Frisen, 2010). In modern Western society, women have been pressured to conform to a slender, idealized image of physical beauty and attractiveness (Dittmar, 2005; Polivy & Herman, 2004). Alternately, this image, despite its ubiquity in all forms of popular media, has been called a “European” or “Caucasian” standard of beauty. Before the mid-1980s, body image dissatisfaction was regarded as a “golden girl problem,” implying that the phenomenon was the province of young White Western women (Holmqvist & Frisen, 2010, p. 133). Evidence from the last 20 years clearly shows that appearance concerns and body dissatisfaction are not limited by culture, ethnicity, or gender and that body

dissatisfaction is more prevalent in affluent, Westernized countries (Holmqvist & Frisen, 2010). It has become more evident that body image dissatisfaction does not focus only on the dominant culture but minority cultures as well. Thus the first aim of this literature review is to define body image and discuss the discrepancies in the research involving the body image of females from various ethnicities including African American, Asian American, Caucasian American, and Hispanic American.

Despite the research conducted on various ethnic groups, little research has focused on the relationship between ethnic identity and body image. The second aim of this literature review is to define ethnic identity, discuss its relationship to body image, and examine the studies that currently exist on the topic.

Research on the thinness ideal and sociocultural factors has also received a lot of attention in the body image literature. The last aim of this literature review is to examine possible correlates of body image dissatisfaction such as influences from the media, family, and religion.

### **Body Image**

Body image is a subjective mental representation of one's physical appearance that is constructed from self-observation, reactions from others, and a complex interaction between emotions, memories, experiences, and attitudes that are both conscious and unconscious (J. Thompson, 1990). In other words, body image is the way individuals perceive their physical appearance. It develops through self-evaluation, reactions from others, and life experiences. Body image is comprised of four components: affective (i.e., anxiety related to body image), behavioral (i.e., avoiding experiences related to the body), cognitive (i.e., realistic appearance ideal), and

perceptual (i.e., accurately estimating one's body size) (S. Thompson et al., 1999). The term body image can have either a positive or negative connotation. Individuals who possess a positive body image are content with their physical appearance. In contrast, a negative body image or body dissatisfaction refers to "any displeasure with one or more aspects of one's body or one's overall physical attractiveness" (Cash, Morrow, Hrabosky, & Perry, 2004, p. 1081).

Body dissatisfaction can be explained on a continuum ranging from pathological to normative with the majority of people categorized in the middle (S. Thompson et al., 1999). At the pathological end, high levels of body dissatisfaction and overestimation of body size are associated with anorexia, bulimia, and body dysmorphic disorder. At the normative end, concern with appearance has been widespread among average females. In today's society, body dissatisfaction has become "a normative discontent" and is associated with a drive for thinness (J. Thompson, 1990). Although it has become normal to have negative feelings about one's physical appearance, it can lead to adverse psychosocial consequences such as depression (Denniston, Roth, & Gilroy, 1992), increased anxiety, poor self-esteem and a diminished quality of life (J. Thompson & Altabe, 1991; Cash, Morrow, et al., 2004). Additionally, research has shown that increased body dissatisfaction can lead to the development of an eating disorder (Cash & Deagle, 1997; Cooley & Toray, 2001; Stice, 2002).

### **Body Satisfaction**

Investigators at UCLA have undertaken the *UCLA Body Project I*, an extensive study of body image and body satisfaction and dissatisfaction involving 2,206 White, Asian, and Hispanic college women and men ranging in age from 18 to 25 (Frederick,



Forbes, Grigorian, & Jarcho, 2007). The sprawling, very diverse UCLA campus is an ideal venue to examine ethnic differences in body concepts. One of the underlying premises of the study is to investigate whether the theories and constructs that evolved to explain the experiences of the White women on whom most of the research on body satisfaction has focused are applicable to the experiences of ethnic minorities. Given the adverse psychological consequences of body dissatisfaction for men as well as women, they also deemed it important to include both genders in research. The Body Project I was conducted during 2005 and 2006.

Objectification theory provided the theoretical framework for the Body Project. With its origins in feminist theory, objectification theory proposes that women are more likely than men to be bombarded by messages from the media, as well as from parents, peers, and men that “their appearance is central to their worth” and as a result to be routinely subjected to scrutiny (Frederick et al., 2007, p. 318). Given this pressure, women turn to *appearance surveillance*, defined as constant monitoring of one’s appearance and how one appears to others. One of the risks of intensive appearance surveillance is becoming preoccupied with perceived defects in one’s appearance, resulting in decreased body satisfaction.

The results affirmed that women experienced greater body dissatisfaction than did men and monitored their appearance (appearance surveillance) more often than did the male participants. In analyzing the results for body satisfaction, Frederick et al. (2007) call attention to the different trends observed for women and men, which reflect social pressures to be thin and muscular, respectively. Underweight men were less satisfied with their bodies than were underweight women but across the full spectrum of BMI

categories, women in classifications from middle healthy weight through upper overweight experienced lower body satisfaction than did men.

With regard to ethnicity, White women had higher body satisfaction than did Asian or Hispanic women although the difference between White and Hispanic women was neutralized by controlling for BMI. Frederick et al. (2007) observed the same pattern for men. The findings did not support the theory that people who engage in high levels of surveillance would have lower body satisfaction. On the contrary, many women and men who were inclined to engage in high surveillance reported high body satisfaction. Frederick et al. ascribe this effect to individual differences, and for women, potentially the extent they diverge from the slender ideal. The study suggests that for some men and women, appearance surveillance may affirm that they are physically attractive thereby resulting in high body satisfaction.

Miller et al. (2000) also included gender in their study of body image perceptions among university students. Their sample of 120 students was much smaller than the UCLA project and involved African American, White, and Hispanic students. The participants' scores on the MBSRQ Appearance Orientation scale showed that regardless of gender or ethnicity, appearance was important to all the student groups. Broken down according to gender and ethnicity, the findings were consistent with other research reporting the highest levels of body satisfaction among African American women. The White women displayed the lowest body satisfaction among the three ethnic groups with the Latinas falling between the other two groups. Gender differences emerged not only on body image and weight but also on the fitness and health dimensions of body esteem.

Miller et al. (2000) called for greater attention to the non-appearance dimensions of body esteem, a point raised more recently by Jefferson and Stake (2009).

The UCLA Body Project II explored breast and body dissatisfaction among 729 UCLA women in a sample that included African American women as well as White, Hispanic, and Asian women (Forbes & Frederick, 2008). The researchers theorized that in view of the emphasis on large breasts in American society, women with smaller breasts would be less satisfied with their breasts and that across all four ethnic groups, women who were more dissatisfied with their breasts would also experience a greater degree of body dissatisfaction. The findings were consistent with the status awarded to larger breasts, with 61% of the women expressing a desire for larger breasts, 14% reporting a desire for smaller breasts, and 25% not wishing any change in breast size. There were no ethnic differences in breast dissatisfaction but, consistent with the findings of UCLA Body Project I (Frederick et al., 2007), the Asian women reported lower overall body satisfaction. Forbes and Frederick (2008) had expected the Asian women to have lower breast satisfaction compared to women of the other three ethnic groups and African American women to have higher breast and body satisfaction. Neither assumption was supported by the results.

Swami, Airs, Chouhan, Leon, and Towell (2009) criticize the existing research on body image in women for focusing on *negative* body image. They also call for greater attention to cultural differences in women's acceptance of their bodies. Their own research (2009) was conducted with 387 women drawn from several universities in the Greater London area. Out of that total, 131 women were Caucasian (all British), 122 were South Asian heritage (mainly India and Pakistan), 67 were African Caribbean (all West

Indian), and 67 were Hispanic (Iberian Peninsula or Latin America). Positive body image was assessed by the Body Appreciation Scale (BAS), which has four dimensions: *favorable opinions of one's body*, *acceptance of the body in spite of imperfections*, *respect for the body* (especially in relation to physical needs), and *protection of the body* (including rejection of unrealistic ideals). The researchers also used the SATAQ-3 and the Rosenberg Self-Esteem Scale. BMI was also calculated for the analysis.

The highest levels of body appreciation were reported by the Hispanic women followed in descending order by the African Caribbean, Caucasian, and South Asian women. Swami et al. (2009) note that the higher body appreciation of the African Caribbean women corresponds to findings from research with British school children as well as the higher body satisfaction of Black women compared to Caucasian women in North America. Interestingly, the high level of body appreciation exhibited by the Hispanic women contrasts sharply with the high level of body *shame* observed in the Canadian study (Boisvert & Harrell, 2009). Neither finding is consistent with research on Hispanic women in the U.S. Boisvert and Harrell noted that their Latin American sample was older and culturally distinct from the young Mexican American women who predominate in studies of body image and eating disorders in the U.S. These differences underscore the diversity of people classified under the umbrella terms of Hispanic, Asian, and African origin in multicultural research. Some authors argue that there should be greater attention to national and cultural differences among women or men of the same ethnic group as well as the cultural context in which the research is carried out (Cummins & Lehman, 2007; Holmqvist & Frisen, 2010).

Swami et al. (2009) also examined internalization of the thinness ideal and self-esteem as possible mediators of body image. They observed that the SATAQ-3 scores of the African Caribbean and Hispanic women in their London sample showed that, in general, they were less reliant on the media as a source of information about appearance standards, they felt less pressure from the media to change their appearance, and they were less likely to internalize media ideals into their self-image compared to Caucasian and Asian women. Scores on the Rosenberg Self-Esteem Scale indicated that Hispanic and African Caribbean women also had higher self-esteem compared to Caucasian and Asian women. Results from Swami et al.'s (2009) study suggest that high self-esteem was the strongest predictor of positive body image regardless of ethnic affiliation. The researchers' suggest that high self-esteem may guard against the negative effects of sociocultural or familial influences leading to a more positive body image. Swami et al. (2009) found that Hispanic and African Caribbean women displayed the most self-esteem and less media pressure compared to Caucasian and Asian women and suggest that self-esteem is the strongest predictor of body satisfaction regardless of ethnicity.

Kennedy, Templeton, Gandhi, and Gorzalka (2004) explored body image satisfaction among Canadian undergraduate women and men of European and Asian descent in a comparison that included participants of two Asian heritage groups: Chinese and Indian. Although the study was initially intended to include a broader range of cross-cultural comparisons, there were insufficient numbers of students from other ethnic or cultural groups for inclusion in the quantitative analysis. Thus the analysis was based on 890 participants of Chinese descent (623 women and 267 men), 130 participants of Indian descent (83 women and 47 men), and 451 participants of European descent (323

women and 128 men). Body image was assessed by the body image subscale of the Derogatis Sexual Functioning Inventory.

Kennedy et al. (2004) found significant distinctions in body image satisfaction between all three ethnic groups with the most positive body image reported by the Caucasian students, then the Indian students, and the Chinese students who displayed the lowest level of body image satisfaction. The Chinese students reported low levels of satisfaction with their overall appearance, specific body parts, and physical condition. Both the Chinese women and men expressed low satisfaction with their facial features, consistent with other research (Frederick et al., 2007). Interestingly, there was one item on which there was neither gender nor ethnic differences: the body image statement “I am too fat.” In short, concerns about weight and a desire to be thin were virtually universal. Only the men, however, expressed concerns about being underweight (Kennedy et al., 2004).

The Chinese women were especially dissatisfied with the size of their breasts, similar to the UCLA study (Forbes & Frederick, 2008). For the Chinese students, birthplace and age of immigration for those who immigrated to Canada exerted a significant impact on body image (Kennedy et al., 2004). Only one-third of the Chinese heritage participants were born in Canada. This group had higher body satisfaction than did those who arrived in Canada before age 12, although the difference between the two groups was not significant. Both of these groups had significantly higher body satisfaction than did the Chinese students who immigrated to North America at age 12 or older. Immigrating to a new culture during adolescence might make young people especially vulnerable to sociocultural influences on body image.

The overall findings showed that men tended to be more satisfied with their bodies than did women. Kennedy et al. (2004) noted that almost all the individual items displayed the same effect but the gender differences always fell short of significance. Although the cultural pressures on women would suggest that the gender differences would be more pronounced, college students of both genders are concerned with their physical attractiveness, appearance, and weight.

In a departure from the typical focus on college students, Snooks and Hall (2002) deliberately chose middle-aged, middle-class women for their investigation of body size, body image, and self-esteem in African American, Mexican American, and White women. The sample size was small, 50 women, and most were recruited via information sheets about the study. The mean ages of three groups ranged from 37.43 for the White women, to just under 40 for the Mexican Americans. Body image was assessed using a ranking task in which the participants were asked to select their “real” and “ideal” body image from six pictures of women’s figures.

The only significant ethnic distinction was that the African American women had significantly higher BMIs and were much heavier than the White women, which is consistent with the general trend in the U.S. However, Snooks and Hall (2002) found no significant differences between the three ethnic groups on self-esteem, body image, or discrepancies between the real and ideal self. The lack of differences on these measures, particularly between the White and African American women, contrasts with most research findings. One possible explanation is the age of the participants compared to the college samples given that ethnic differences in body image decrease after young adulthood (Roberts, Cash, Feingold, & Johnson, 2006). An alternative explanation

offered by Snooks and Hall (2002) is that when income status is similar, as with their participants, ethnic differences in body image may diminish.

### Body Image Perceptions

In view of the vulnerability to depression and eating disorders caused by body dissatisfaction, Grabe and Hyde (2006) deemed it important to undertake a quantitative analysis to discern differences and similarities in the manifestation of body dissatisfaction among women of different ethnic heritage. They embarked on their meta-analysis of body dissatisfaction from the perspective that there was limited understanding of ethnic differences in body satisfaction and dissatisfaction among women of different ethnic groups. The prevailing assumption was that Black women had more flexible standards for body shape than did White women with the result that they were less likely to be dissatisfied with their own shape and size. Far less attention was given to the body image of Latina and Asian women. Their meta-analysis review intentionally only included research focusing on the evaluative aspect, that is to say, the satisfaction and dissatisfaction with one's body image.

They analyzed a total of 98 studies according to six main comparisons yielding 222 effect sizes. One important analysis found that body dissatisfaction between Black and White women, producing an overall mean effect size of 0.29, supported the assumption that White women are less satisfied with their bodies than are Black women but with only a small difference. When comparisons were conducted across the four ethnic groups, the differences were even smaller and in some cases approached zero. Based on their findings, Grabe and Hyde (2006) concluded that the notion that body dissatisfaction is a "golden girl problem" is a cultural misconception that is potentially



damaging to women of ethnic minorities. In summary, the analyses showed fairly equivalent levels of body dissatisfaction between White, Asian, and Latina women with only a small tendency for Black women to display lower body dissatisfaction.

In addition, Grabe and Hyde (2006) noted that there were differences in the mechanisms that underpin body dissatisfaction in women of different ethnic groups. For example, a desire for lighter skin among Black and Asian women was noted while Asian women also reported more dissatisfaction with facial features. And among women of the four ethnic groups, there was variation as to what the ideal breast size was. Thus, they suggest that it would be also valuable for future studies to explore the factors that lead ethnically diverse women to struggle with body dissatisfaction (Grabe & Hyde, 2006).

Research also suggests age patterns are evident when looking at women and their body dissatisfaction. Grabe and Hyde's (2006) meta-analysis observed that ethnic differences in body dissatisfaction were nil in childhood, peaked in adolescence and young adulthood, and declined over the course of adulthood. Similarly, Roberts et al. (2006) found ethnic differences to be most pronounced among young adults, peaking at age 25 and diminishing around the age of 40.

Roberts et al. (2006) conducted a meta-analysis of 55 research articles published from 1967 to 2002 that examined contributing factors of body dissatisfaction among Black and White women. Results from this meta-analysis found that Black females exhibited greater body satisfaction compared to White women and the largest mitigating factor was global self-esteem. The authors noted that Black women continually displayed greater global self-esteem and body image satisfaction compared to White women. Additionally, self-esteem among Black females appears to increase with time. This meta-

analysis revealed that a leading cause of increased body image among Black females is global self-esteem.

Another interesting finding from Roberts et al.'s (2006) meta-analysis was a decrease in weight related concerns among Black and White women. The authors note that, in the past, White females were more concerned with weight compared to Black females; however, this trend is rapidly decreasing. The authors provide two explanations for this decline. First, as ethnic women gain more prominence in the media, it is possible that these images are shaping the White standard of beauty. The second, more accepted view is that in terms of body image, these two races are converging, with an increase in body satisfaction seen in White women rather than a decrease in body satisfaction among Black women. It has been shown that weight-related concerns among Black and White women are decreasing with time.

Cachelin, Rebeck, Chung, and Pelayo (2012) examined the body image of 801 women and 428 men of African American, Asian, Hispanic, and European descent. Through the use of silhouette drawings, participants were asked to rate the following: "your current shape and size," "the size and shape you would most like to be," "the smallest size and shape you feel is realistic for you to attain," as well as questions related to what size and shape the opposite sex finds most attractive. The authors found that Asian women experienced less body dissatisfaction compared to the other ethnic groups. Additionally, African American, Caucasian, and Hispanic women displayed comparable levels of body dissatisfaction. The authors conclude that ethnic differences in preferences for female size or tolerance for overweight female shapes no longer exist.

Other studies show that even very young children can be susceptible to sociocultural pressures from the media as well as from peers to embrace the thin ideal. Clark and Tiggeman (2006) found that the desire to be thinner, resulting in body dissatisfaction, was common among 9-12-year-old girls. They surveyed 100 Australian girls ages 9-12 on media exposure, influence of peer group, body image dissatisfaction, and internalization of the thinness ideal. The researchers found that body dissatisfaction increased with age as did influence of peer group. In terms of media exposure and internalization of the thinness ideal, these variables did not appear to change with age.

Dohnt and Tiggeman (2006) found desires to be thinner in girls as young as 5. They examined the body image, self-esteem, peer influence and media exposure of 97 Australian females ages 5-8 years old. Similar to the findings of Clark and Tiggeman's study (2006), results suggested that peer influence and media exposure contributed greatly to body dissatisfaction among the participants. Dohnt and Tiggeman (2006) pointed out that, while most of the girls in their sample were satisfied with their bodies, lower measures of self-esteem were noted among those who reported wanting to be thinner.

In another study, Clay, Vignoles, and Dittmar (2005) surveyed 136 females ages 11-16 from a same-sex state school in London, England, on internalization of the thinness ideal, body satisfaction, self-esteem and comparisons to media models. They found that adolescent and preadolescent girls (ages 11-16) experienced decreased self-esteem after viewing photographs of ultra thin and average size models. This effect contrasted with the reactions of adult women who tended to respond favorably to pictures of average size women. They suggest that the older girls' display of lower self-esteem when compared to

the younger girls reflects the downturn in body satisfaction and impacted the older girls' attention to and internalization of idealized media images as they age. It is apparent that young girls' body image and self-esteem are impacted by influences from their peers as well as from the media.

The research review and analysis conducted by Cash, Morrow, et al. (2004) spanned the years from 1983 to 2001. The studies were all centered on students attending a single public university, and the final analysis included 22 studies involving 3,127 male and female students. All the studies utilized the following subscales from the Body-Self Relations Questionnaire (MBSRQ): *Appearance Evaluation*, *Body Areas Satisfaction*, *Overweight Preoccupation*, and *Appearance Orientation*. They reported that the studies they reviewed found that among White women there was a significant downward trend in appearance evaluation (indicating a more negative body image) from the 1980s into the early and mid-1990s accompanied by greater preoccupation with being overweight. From the mid-1990s into the 2000s, however, that trend was reversed and both White and Black women reported more favorable appearance-related self-evaluations and less preoccupation with being overweight. The pattern for men (predominately White) remained stable over the entire time period. Results from this meta-analysis found that as time progresses Black and White women are more satisfied with their appearance and are less preoccupied with their weight.

Experimental research designs are often utilized to examine the influence of media images on the appearance and body self-concepts of girls and women (Evans & McConnell, 2003; Frisby, 2004; Want, Vickers, & Amos, 2009) and adolescent girls (Clay et al., 2005). In a meta-analytic review, Groesz et al. (2002) examined the effect

sizes of 25 studies that met five criteria: female samples, the presentation of the entire body of thin models taken from actual media, a control comparison group exposed to a different type of stimuli, assessment of body dissatisfaction or physical attractiveness as the dependent variable, and sufficient information for the intended analysis. A small but significant and fairly consistent effect size (-0.30) emerged from the meta-analysis of 25 studies demonstrating that women appraised their bodies more negatively after being shown media images of thin models compared to images of average or plus-size models or irrelevant images (cars or houses). Ethnicity was not included in the analysis but the effect sizes tended to be larger for adolescent girls under the age of 19, a time of heightened sensitivity to idealized images in fashion magazines, advertising, television, and other media (Clay et al., 2005; Morrison et al., 2004). These results suggest, in summary, that there has been a decrease in body dissatisfaction and less preoccupation with weight among women. Additionally, it has been suggested that internalization of the thinness ideal, media exposure, peer influence and self-esteem are mitigating factors in body image dissatisfaction.

### **Body Image: A Longitudinal Analysis**

According to Bradford and Petrie (2008) although there are sociocultural models designed to explain the development of eating disorders, there are few longitudinal studies examining the stability of the presumed pathways over time. For example, given the focus on college women, they raise the question of whether factors such as internalization of the thin ideal or body dissatisfaction might change over the course of the first college year. Another question is whether the relative impact of the different factors within the model remains fixed over time or whether some lose or gain in

significance. Bradford and Petrie concentrate on the first year of college due to the cumulative pressure experienced by young adults making the transition from high school. The demands of adjusting to college life make the first year of college a time of heightened vulnerability to psychological distress including the development of eating disorders.

The participants at the inception of the study were 480 first-semester female students entering their first year at two large public universities located in the Southwest. Approximately half the students completed the second assessment, leaving 236 students on whom Bradford and Petrie (2008) based their analysis. The study was limited only to women who were entering college directly from high school. Caucasian women comprised nearly 70% of the sample which also included African American (13.9%), Latina (8.8%), Native American (4.6%), and Asian American (1.7%) women as well as a small proportion of students who did not disclose their ethnicity. The participants were assessed on body image, internalization of sociocultural beliefs, negative affect through the Visual Analogue Mood Scale (VAMS), and eating disturbances using both the EAT-26 and the BULIT-R, which assesses signs of *bulimia nervosa* as defined by *DSM-IV*. The first survey was conducted when the women were within the first 2-3 months of the first college semester. The second assessment took place roughly 6 months later.

Bradford and Petrie (2008) found that internalization of the thin ideal at the onset of the study predicted body satisfaction later in the semester. Additionally the degree of body satisfaction at the initial assessment was associated with internalization of the thinness ideal at the culmination of the study. In analyzing the simultaneous effects at the second assessment, the researchers found that internalization was related to body

dissatisfaction but the reverse effect did not hold. According to Bradford and Petrie, the pattern they observed suggests “a cycle that maintains women’s vulnerability to social influences and continued body satisfaction over time” (p. 256). Internalization and body dissatisfaction remained stable over the course of the freshman year and accounted for 50% to 65% of the observed variance. The stability of this effect led Bradford and Petrie to surmise that body image disturbances during the first college year are not a reaction to stressors inherent in the transition to college but have their origins earlier in adolescence. In fact, body dissatisfaction may arise in young girls even before adolescence (Clark & Tiggemann, 2006).

The longitudinal analysis illuminated the relationship between negative emotions and body dissatisfaction by suggesting that body dissatisfaction precedes and intensifies depression. Especially striking was the relationship between depressive symptoms and disordered eating which emerged across all analyses. As interpreted by Bradford and Petrie (2008), women turn to binge eating as a way of coping with negative emotions but this very ineffective mode of coping may only serve to aggravate negative feelings. The intervention strategies Bradford and Petrie suggest to prevent or disrupt the complex interaction of factors that contributed to body image dissatisfaction and disordered eating in young women include intervention materials such as those used by Want et al. (2009) which consisted of Appearance Interventions, and Weight and Shape Interventions. For a more thorough discussion of Want et al.’s (2009) study see pages 63-67 below.

### **Body Image and Eating Behavior**

Pointing to the mixed findings regarding ethnic differences, Shaw, Ramirez, Trost, Randall, and Stice (2004) explored the nature of eating disorder symptoms and the

underlying risk factors among adolescent girls and young women from different ethnic groups. The composite sample of White, African American, Latina, and Asian participants was drawn from four data sets: adolescents from private and public middle schools, adolescents from two separate private school samples, and a college student sample. The total sample was 72% White, with Latina comprising the next largest group (14%), and Asians and African Americans representing 8% and 6%, respectively. The ages of the participants ranged from 11 to 26 years with a mean of 14 and a mode of 13.

The risk factors for eating disorders addressed by the study included perceived social pressures to be thin, modeling of disordered eating (behaviors displayed by friends, family, and media images), internalization of the thin ideal, body dissatisfaction, dieting, self-esteem, and negative affect. Shaw et al. (2004) also included calculations of the participants' BMIs. Only one significant ethnic difference emerged from the analyses: the Latina and African American adolescents and young women were significantly less likely to internalize the thin ideal than were their Asian and White counterparts. Apart from that distinction, no ethnic differences surfaced in terms of eating disorder symptoms or most of the risk factors for disordered eating. In addition, none of the tests performed by the researchers to analyze the relationships between the risk factors and eating disorder symptoms showed differing results between ethnic groups. Finally, even BMI did not differ significantly between participants of different ethnic groups. Shaw et al. (2004) attribute this last effect to their controlling for social status (based on maternal education), noting that ethnic differences in obesity are probably more a reflection of differences in socioeconomic status rather than ethnic heritage per se. Overall, the



findings suggest that as Holmqvist and Frisen (2010) state, sociocultural pressures to be thin are no longer a “golden girl” phenomenon.

Gordon, Castro, Sitnikov, and Holm-Denoma (2010) investigated the relationship of cultural and personal physical ideals and symptoms of eating disorders in a sample of 276 White (29%), Latina (27%), and Black (44%) college women. In contrast to most U.S. research in which the Latina or Hispanic participants are primarily of Mexican heritage, most of the Latina women had either Cuban or Puerto Rican backgrounds. The Latina group actually reflected a broad range of Spanish heritage groups including women from Latin America and Spain. Among the Black participants, 21% were born in the Caribbean and 2% were born in Africa. The overall sample was actually very diverse but the small numbers of women from most groups precluded separate analyses. The participants were surveyed on self-esteem, acculturation, acculturative stress, eating disorder symptoms via subscales of the Eating Disorder Inventory (EDI), and body image using the Stunkard Body Figure Scale (BFS). The Stunkard Body Figure Scale (BSF) assesses body image using seven pictures of the female body types ranging from very underweight to very overweight. The participants were shown the BFS four times and asked to choose their ethnic group’s ideal body shape, the American mainstream culture’s ideal body shape, their personal ideal body shape, and their perceived body shape.

The results showed that as Gordon et al. (2010) expected, the Black and Latina women chose larger body types for their ideals than the American cultural ideals. The White women chose slimmer body ideals than did either the Black or Latina participants. The Latina women selected body types for their ethnic cultural ideal that were significantly slimmer than the ethnic ideals of the Black women but bigger than the ideals

of the White women. For their personal ideals, the Latina women were much closer to the White women. In fact, there were no significant differences in the personal ideal images chosen by the White and Latina women, which were significantly slimmer than the personal ideal images chosen by the Black women.

The findings revealed partial support for the assumption that the discrepancy between their perceptions of their own figure and perceptions of the American ideal figure would be more strongly linked with eating disorder symptoms among the Latina and Black participants than the discrepancy between their perceived figure and their ethnic group ideal. While both discrepancies were associated with higher scores on the eating disorder scales among the Black women, only the discrepancy between self-perceptions and ethnic group ideal were linked with body dissatisfaction among the Latinas. In the case of drive for thinness, the gap between one's own body shape and the mainstream ideal was a significant factor only for the Black women. For the Latina women, the decisive factor was the gap between personal body shape and the ethnic ideal.

Regarding the cultural factors, a greater degree of acculturative stress was linked with more intensified drive for thinness among the Latinas and with signs of bulimia among the Black women. Gordon et al. (2010) surmised that the Black women in their sample might use binge eating to cope with acculturative stress while Latinas might try to cope through dieting. Acculturation was not a significant factor in the analysis, leading Gordon et al. to theorize that acculturative stress rather than acculturation may underlie the development of disordered eating. They interpret their findings as evidence of the

importance of considering cultural factors in understanding body image and eating disorders in Black and Latina women.

### **Special Considerations for Asian women**

Phan and Tylka (2006) observed that the existing theoretical models used to examine the development of eating disorders in women had not been applied to Asian American women nor was there a model uniquely designed to assess their experience. For their study, Phan and Tylka adapted the model formulated by Tylka and Subich (2004). The model encompassed a spectrum of internal and external influences including pressure to be thin, negative emotions, internalization of the thin ideal, body image disturbance, and body preoccupation. The cultural model proposed by Phan and Tylka (2006) involved pressure for thinness, self-esteem, and ethnic identity as prospective influences on internalization of the thin ideal, which in turn may lead to body preoccupation and ultimately to eating disorder symptoms. When Phan and Tylka (2006) examined correlates of pressure for thinness, family social support turned out to be insignificant and was eliminated from the final model but peer social support remained.

The sample was comprised of 200 Asian American college women ranging in age from 17 to 37 years. The assessment tools selected by Phan and Tylka (2006) were largely those used in the original study of Tylka and Subich (2004) including the Perceived Sociocultural Pressure Scale (PSPS), the SATAQ-1, the BSQ-R, and EAT-26. Phan and Tylka (2006) also included the Rosenberg Self-Esteem Scale and Phinney's MEIM-EI to assess ethnic identity.

The path analysis revealed that perceptions of pressure to be thin among Asian American women exerted a slight effect on self-esteem and a moderate effect on body

preoccupation, acting directly and indirectly via internalization of the thin ideal. Self-esteem also operated directly and indirectly to predict body preoccupation through the mechanism of internalization of the thin ideal. Finally, according to Phan and Tylka's (2006) analysis, body preoccupation was a powerful predictor of eating disorder symptoms. Phan and Tylka noted that their findings were largely congruent with those of Tylka and Subich (2004) with a primarily Caucasian sample with two exceptions. Self-esteem was less of an influence among the Asian American women, and internalization of the thin ideal had a moderate impact on body preoccupation among the Caucasian college women. A marked distinction, however, was the small size of the Asian American sample (200) compared to the 463 women surveyed by Tylka and Subich.

Phan and Tylka (2006) raised the same issue as Lau, Lum, Chronister, and Forrest (2006), namely that Asian American women may be comparing themselves to an Asian ideal of beauty or to their own Asian American peers who may be petite and slender. Phan and Tylka (2006) surmise that Asian American women with high and low levels of ethnic identity may be comparing themselves to two different reference groups: women of their own ethnic heritage and women of European heritage, respectively. In view of the negligible effect of ethnic identity, Phan and Tylka emphasized that it was erroneous to assume that strong ethnic identity protects Asian American women from developing eating disorders. On the other hand, enhancing self-esteem is a more promising strategy for reducing the risk of eating disorders. Working in conjunction, the three factors of sociocultural pressures to be thin, internalization of the thin ideal, and self-esteem explained 43.4% of the variance in body preoccupation in Phan and Tylka's study, which was directly linked with disordered eating.

Jung and Forbes (2007) conducted a cross-cultural study of body dissatisfaction and disordered eating patterns involving college women in the U.S., South Korea, and China. The researchers undertook the exploration on the theory that extensive, rapid social changes, in particular changes in economic systems and in the role of women, are factors in the upsurge of body dissatisfaction and eating disturbances observed in non-Western societies. According to the perspective of many feminist theories, changes in women's roles that threaten traditional male dominance and bring societies closer to gender equality have been met by greater pressure on women to adhere to idealized and unrealistic standards of beauty. They call attention to the 1920s and 1970s, both eras in which dramatic changes in favor of women occurred and fashion magazines displayed the slimmest and least curvaceous models. From an alternative perspective, however, it may not be surprising that eras of strides toward gender equality would favor an androgynous body image. By de-emphasizing feminine curves, the 1920s liberated women from the constraining corsets, crinolines, and hobble skirts of the Victorian and Edwardian eras.

Nevertheless, according to Jung and Forbes (2007), the feminist theory proposes that societies where opportunities for women are expanding and there are dramatic changes in traditional gender roles would also see increased pressures on women to conform to an idealized physical image. They also point out that in China and Korea, thinness in women was traditionally associated with poverty, poor health, and decreased fertility.

Jung and Forbes (2007) juxtaposed the feminist theory with the sociocultural theory in their study of 348 women recruited from a central university in Beijing,

universities in Seoul and Kyunggi province in Korea, and a mid-Atlantic university in the U.S.

Marked differences arose in the preferences of the Chinese and Korean women for an ideal body, with the Chinese women selecting larger figures as their standards of beauty and the Korean women choosing small body types that would be classified as underweight based on U.S. health standards. In effect, the Chinese women selected images that reflected traditional Chinese standards while the Korean women chose a physical ideal that departed from the traditional preferences of their culture.

Based on the social change hypothesis Jung and Forbes (2007) theorized that the Korean women, whose society is undergoing the greatest degree of social upheaval, would have the highest body dissatisfaction while the lowest body dissatisfaction would be found in the American women. In contrast, sociocultural theory would predict the highest body dissatisfaction in the American women and the lowest levels in the Chinese women. The findings were more consistent with the feminist social change theory; the Korean women did display the highest body dissatisfaction. Jung and Forbes speculated whether the lower body dissatisfaction among the U.S. women could reflect a diminishing impact of idealized media images given that people are inundated with such images. A study by Cash, Morrow, et al. (2004) actually supports this speculation. In their study there was evidence of declining sensitivity to pressures on women to be thin.

The Jung and Forbes (2007) study found that disordered eating patterns were mixed. Although, there were no significant differences between the women from the three countries with respect to drive for thinness, when it came to body dissatisfaction, the Korean women showed greater tendencies toward disordered eating than did the U.S.

or Chinese women. Jung and Forbes (2007) pointed out that the Chinese and Korean women were university students residing in cities where exposure to Western influences was most likely very high. In fact, other studies have found higher body dissatisfaction among women and men in affluent and Westernized areas of Asia than in the U.S. (Holmqvist & Frisen, 2010). Exposure to Western media is one explanation but Holmqvist and Frisen emphasize that understanding of this phenomenon is very limited. In summary, Jung and Forbes (2007) believe their work supports the feminist theory more than the sociocultural theory but also view insights from the two theories as complementary and helpful.

### **Special Considerations for African American Women**

Henrickson, Crowther, and Harrington (2010) explored ethnic identity and eating behaviors of African American women with emphasis on the role of expectancies about eating and dieting. Expectancies are defined as “acquired beliefs about relationships between behavior and outcomes that are remembered and applied to situational contexts, with different learning histories explaining different expectancies” (p. 88). Eating carries powerful symbolism in our culture, and it is widely recognized that many people turn to eating to reduce stress or negative emotions. For women with eating disorder symptoms, eating can be a reward or a punishment. Henrickson et al. (2010) propose that African American women who feel conflicted about their own ethnic identity and cultural pressures to adopt a thin, White ideal of beauty may use food or dieting as a mechanism for allaying the resulting stress. Theoretically, the extent they engage in this form of coping would be contingent on the expectancies they attached to “the positive and

reinforcing effects of food, dieting, and thinness,” particularly with regard to managing strong emotions (p. 88).

The participants for the study were 93 African American graduate and undergraduate women who were assessed on the MEIM, the Thinness and Restricting Expectancy Inventory (TREI), the Eating Expectancy Inventory (EEI), and the EAT. The findings supported the assumptions of Henrickson et al. (2010) regarding the role of expectancies related to eating and thinness. Among the women who expected that eating would help them manage emotions and that dieting would lead to overall life improvement, the researchers observed a significant negative relationship between ethnic identity search and affirmation, belonging, and commitment, and maladaptive attitudes and behaviors related to eating. This suggests that these women possess less ethnic identity search and affirmation, belonging and commitment and more maladaptive eating patterns. On the other hand, there was a significant positive association between orientation to other groups (probably White mainstream culture) and maladaptive eating behaviors and attitudes in that same group of women.

Although Henrickson et al. (2010) acknowledge that other studies do not necessarily support the theory that ethnic identity exerts a protective effect (see Baugh, Mullis, Mullis, Hicks, & Peterson, 2010), their findings show evidence that strong ethnic identity serves to protect African American women from pressures toward thinness and excessive dieting whereas other orientation makes them more susceptible to binge eating and food restriction.

Additional support for the protective effect of ethnic identity on African American women also comes from the research of Wood and Petrie (2010). Their study



involved 322 African American college women recruited from five colleges and universities in the South: two predominately White public universities, two historically Black universities, and one historically Black college. The assessments used for the study included the MEIM, the PSPS, the BSQ-10-R, the BULIT-R, and the Beliefs About Attractiveness Scale-Revised (BAAR).

Building on work such as the study of Phan and Tylka (2006), Henrickson et al. (2010) tested two models of the relationships between ethnic identity, social pressures to be thin, internalization of cultural standards of beauty, body image concerns, and disturbed eating.

The findings revealed a path model in which the stronger the African American women's ethnic identity was, the less they internalized mainstream ideals of attractiveness and beauty. Greater degree of exposure to societal pressures and messages (from friends and the media) resulted in a greater degree of internalization of those messages, which in turn, induced greater concerns about body size and shape. Ultimately, internalized physical ideals and body image concerns were directly linked with patterns of disordered eating.

### **Special Considerations for Latina Women**

Bettendorf and Fischer (2009) explored the prospective influence of the cultural factors of ethnic identity, familism, and enculturation as protective factors against sociocultural influences that can lead to body dissatisfaction and eating disorders. Familism, referring to close family bonds and cultural values that give precedence to the family over the individual, is one of the strongest facets of Mexican culture. For assessing familism, the researchers used the three family subscales of the Mexican American

Cultural Values Scale for Adolescents and Adults. The three subscales are *Support*, *Obligation*, and *Referent*, which denote the extent that the person seeks out advice from family members in making important decisions, consider the impact of the decision on the family, and represent the family in a positive manner. Additional instruments included the Acculturation Rating Scale for Mexican Americans II (ARMSA-II), the MEIM-R, EAT-26, and BULIT-R.

Familism proved to be a significant buffer against the association between acculturation and the three eating-disorder-related factors of control concerns, restricted eating, and body dissatisfaction (Bettendorf & Fischer, 2009). Ethnic identity appeared to buffer the association between acculturation and restricted eating but not body dissatisfaction or control concerns. Enculturation (Mexican cultural orientation), on the other hand, had no significant role in the model. The strong protective effect of familism is illustrated by the finding that a greater degree of acculturation was linked with higher scores on all three eating and body-related concerns but only among the women who placed lower value on familism. Among women with higher levels of familism, the relationship of acculturation to body dissatisfaction and tendencies toward disordered eating was neutralized or reversed.

Regarding the mixed results for ethnic identity, Bettendorf and Fischer (2009) suggest that ethnic identity might have some protective effect in that it stresses group membership rather than body type or physical appearance. However, as Phinney and Ong (2007) emphasize, ethnic identity is multifaceted and dynamic so the varied results reported for ethnic identity in research on body image should probably not be surprising. In fact, Ong et al. (2010) suggest that one's sense of ethnic identity is fluid enough to

change somewhat during the course of a single day. Bettendorf and Fischer (2009) recommend research that directly assesses the extent that body image is a central facet of one's personal and group identity as opposed to inferring it, which is the typical approach.

Regarding the lack of a moderating effect found for enculturation, Bettendorf and Fischer (2009) proposed that women may endorse aspects of both Mexican and Anglo cultural orientation and still espouse any mixture of Mexican and Anglo aesthetic ideals. Devos's (2006) concept of implicit bicultural identity observed in Mexican American and Asian American young adults may offer some explanation of this phenomenon, and with more understanding may prove useful for illuminating the role of various aspects of ethnic identity and body image as elements of one's self-identity.

Warren, Gleaves, Cepeda-Benito, Fernandez, and Rodriguez-Ruiz (2005) applied the sociocultural model of the development of eating disorders to a study of Mexican American, European American, and Spanish (who were studying abroad) college women drawn from three large universities in the Southwest. Three assessments were used: the SATAQ-R, the BSQ, and BMI. The findings supported the sociocultural model. Positive relationships were found between awareness and internalization of the thin ideal and between internalization and body satisfaction. Notably, both of these relationships were more pronounced for the European American women.

According to Warren et al. (2005), a unique feature of their study was their comparison of Mexican Americans to members of the two ethnic majority groups whose cultures contributed to the creation of Mexican American culture. They also find it a strong point of their study that they focused on a specific Hispanic group as opposed to a

broad group of Hispanics thus allowing for more precise examination of the influence of Mexican cultural heritage. The researchers note that “culture is fluid and dynamic” and constantly influenced by historic, political, economic, and ecological forces (p. 247). Their implication for the purpose of preventing eating disorders is that identifying elements of non-Western culture with the power to protect against the development of eating disorders may “help guide Western cultural growth” (p. 247). These elements include countering the idealized ultra-thin image portrayed by the mainstream culture and instead espousing a healthier and more realistic female aesthetic.

Another important step forward, according to Warren et al. (2005), is de-emphasizing appearance as a central facet of female worth. Many Latina and African American women take these steps on their own and collectively with their peers (Patton, 2006; Rubin, Fitts, & Becker, 2003). Rubin et al. cite the lyrics of African American singer Indie.Arie as a cultural model for the development of a healthy self-identity:

I'm not the average girl from your video.  
And I ain't built like a supermodel.  
But I learned to love myself unconditionally,  
Because I am a queen.

Several of the Latina women in the study of Rubin et al. (2003) expressed excitement over the popularity of stars like Jennifer Lopez (who at one time seemed the only Latina with mainstream appeal, according to some participants) and the increasing visibility of a more diverse group of Latina performers. If Roberts et al. (2006) are correct in their assessment, the increasing acceptance of aspects of ethnic minority popular culture by mainstream Americans may be contributing to more flexible attitudes by White women toward different aesthetic ideals.

## **Ethnic Identity**

Over the last two decades there has been an explosion of research on ethnic identity (Ong, Fuller-Rowell, & Phinney, 2010). Multiple models of ethnic identity development have been proposed for African Americans, Hispanic Americans, Asian Americans, and Caucasian Americans (Cross, 1971; Ferdman & Gallegos, 2001; Helms, 1990; J. Kim, 1981; Ruiz, 1990; Sue & Sue, 1971). Most researchers exploring ethnic identity draw on the work of Phinney (1992) who proposed a model of ethnic identity development for members of all ethnic groups. This model is continually being refined and expanded to gain a deeper insight into the concept of ethnic identity as an essential facet of human identity (Phinney, 1992, 1996; Phinney & Ong, 2007; Ong et al., 2010).

Ethnic identity is a dynamic and contextually based concept that has gone through a number of revisions in the past two decades. During Phinney's early stages of research, ethnic identity was defined as the "part of an individual's self-concept that derives from his or her knowledge of membership in a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1981, as cited in Phinney, 1992, p. 156). The term was later defined by Sadowsky et al. (1995) as a sense of belonging or attachment to one's ethnic group, cultural heritage, and values. Phinney (1996) later defined ethnic identity to be the degree of identification individuals have toward their ethnic group. The term was again redefined by Phinney and Ong (2007) as a type of social identity and a multidimensional dynamic construct that evolves over time through a process of exploration and commitment. Ethnic identity is multidimensional and a dynamic concept that is continually evolving.

Ethnic identity plays an important role in human development and identity formation (French, Seidman, Allen, & Abner, 2006). Ethnic identity has proven to be an

important aspect of adolescent development, as it has been linked to their psychological well-being, academic achievement, and their ability to cope with racism and discrimination (Umaña-Taylor, Bhanot, & Shin, 2006). It is crucial in guiding an individual's beliefs, attitudes, and behaviors in situations where the issue of ethnicity is pertinent. Ethnic identity can also influence goals, regulate behavior, and serve as a reference point for self-evaluation (S. Tsai, 2006). Research has also shown that ethnic identity can affect one's choice in romantic partner, friends, parenting style, and career (Chow, 1999). Ethnic identity has been shown to influence and guide most aspects of life.

#### Phinney's Model of Ethnic Identity Formation

Phinney proposed a three-stage model of ethnic identity which is grounded in the theoretical work of Erik Erikson (1993). Phinney developed a model to reflect the stages that all ethnic groups progress through in order to develop an ethnic identity. This model supports the contention that a crisis or awakening of some sort is a precursor to achievement of a positive ethnic identity (French et al., 2006). The model is composed of the following three stages: (a) Unexamined Ethnic Identity, (b) Ethnic Identity Search/Exploration, and (c) Ethnic Identity Achievement.

In the first stage, *Unexamined Ethnic Identity*, individuals have not committed to an ethnic identity (Hoffman, 2006). This stage involves two subtypes: diffusion and foreclosure. Diffusion is defined as a lack of interest in or concern with ethnicity. People who are experiencing diffusion may not be interested in knowing about or being aware of their ethnicity. These individuals have not explored what their ethnicity means to them. Foreclosure occurs when views of ethnicity are based on the opinions of others. An individual's sense of ethnic identity is often derived from their parents, the community or

society as a whole. A person's world is often shaped by the dominant culture's values. Additionally, the individual may internalize the dominant culture's negative views about his or her own ethnic group (French et al., 2006; Phinney, 1993). Phinney contends that individuals who never experience an identity crisis related to their ethnicity will remain in Stage 1 throughout their lifetime (Hoffman, 2006).

In the second stage, *Ethnic Identity Search/Exploration*, individuals begin to explore their ethnic identity. This often occurs as a result of a significant experience or crisis (i.e., discrimination) that forces the individual to become aware of his or her ethnicity. In this stage, individuals become interested in their ethnic heritage and seek and explore the meaning of ethnicity for themselves. For many, this involves researching their country of origin, engaging in discussions with family members and reflecting on what it means to be part of a specific ethnic group. Through this process, individuals gain a deeper sense of understanding of what their ethnicity means to them (Torres, Howard-Hamilton, & Cooper, 2003; Phinney, 1993).

The final stage, *Ethnic Identity Achievement*, is reached when individuals experience and work through a crisis, and make a commitment to their ethnic identity (Hoffman, 2006). For ethnic minorities, ethnic identity achievement involves resolving the cultural conflicts and the lower status of their ethnic group in the dominant culture. Individuals with achieved ethnic identity have developed a way of coping with negative stereotypes and discrimination so that they do not internalize negative images and attitudes held by the dominant culture (Phinney, 1990). Individuals in this stage have a clear and confident sense of their own ethnicity and group membership (French et al., 2006).

Phinney (1990) contends that Stage 3 does not necessarily mark the end of an individual's ethnic identity development. She also suggests that although the process of ethnic identity formation is conceptualized as stages, individuals do not progress through these stages in an invariant sequence nor do they experience all stages (Parham, 1989; Phinney, 1990). The process of ethnic identity formation may persist in cycles that involve further exploration or contemplation of the role or meaning of one's ethnicity. Generally individuals progress to higher stages as they age, but may return to earlier stages to reexamine aspects of their ethnicity throughout life or they may return to earlier developmental stages (Phinney & Chavira, 1992).

Ethnic identity has been at the forefront of research for the past 20 years. A number of models have been developed to explain ethnic identity (Cross, 1971; Ferdman & Gallegos, 2001; Helms, 1990; J. Kim, 1981; Ruiz, 1990; Sue & Sue, 1971); however, only Phinney's model has focused on all ethnic groups (Phinney, 1992). In Phinney's model (1992), individuals progress through three distinct stages while exploring the meaning of ethnic heritage. As ethnic identity develops, it has an impact on all facets of life including goal setting and peer relationships (Chow, 1999; S. Tsai, 2006). It is the impact that ethnic identity has on one's body image that is the topic of interest in my study here.

### **Ethnic Identity and Body Image**

Using the Sociocultural Theory as a framework, Henrickson (2007) examined the relationships between ethnic identity, acculturation, acculturative stress, internalization of the thin ideal, and body image in a sample of 277 Latina women. The path model that emerged from the analysis showed that the more negative communication and pressure



from friends and relatives the women received, the more they internalized the thin idealized image, with the result of more negative body image experience. An intriguing finding was that while the degree of acculturation and subjective feelings of stress emanating from pressure to acculturate significantly moderated the relationship between environmental factors and internalization of the thin ideal, ethnic identity was not a significant factor in the equation. Additionally, the association between environmental influences and internalization of the idealized image was stronger for women who reported low levels of stress due to pressure to acculturate rather than for those who experienced high levels of stress. Henrickson concluded that each facet of culture has a unique and independent effect on Latinas' internalization of the body image idealized by mainstream American culture.

According to Lau et al. (2006), there is a vital need for research on Asian American women's body image development given that there are factors uniquely affecting this population. For example, they point to the "model minority" stereotype, which the researchers argue implies that Asian American women have favorable self-concepts thereby obscuring real problems with body image dissatisfaction. Due to traditional cultural values, Asians are also less likely to seek out psychological counseling. Like their counterparts from other ethnic groups, Asian American women are routinely exposed to idealized images of beauty but in both facial features and body type, their own appearance diverges from the Western ideal.

Lau et al. (2006) employ both Sociocultural and Social Comparison. From the standpoint of social comparison theory, Asian heritage women who compare themselves to the Western beauty ideal are especially disadvantaged. Asian American women are

inundated with media messages of a female ideal of attractiveness centered on being thin, tall, blonde, and having pale skin and European facial features. At the same time, they are confronted with a stereotypical image of Asian beauty that means being dainty, petite, heavier in the legs, and having a “yellow” or ivory-tinged skin tone. Lau et al. (2006) refer to this as a “two-dimensional comparison” or “double bind” situation for Asian American women (p. 262).

Lau et al. (2006) drew on sociocultural theory and acculturation in creating a theoretical framework for their exploration. Their specific focus was *values* acculturation, which they find neglected in research on body image which tends to concentrate on *behavioral* acculturation. There is a substantial body of cross-cultural research documenting differences in Western and Asian cultural values. Differences on the dimensions of individualism and collectivism are the most widely recognized. Offshoots of the Western emphasis on individualism include independence, separateness, self-sufficiency, and egocentricity. In marked contrast, Asian culture places importance on values such as conformity, humility, recognition through achievement, and deference to the family. According to Lau et al., such distinctions in cultural values must be considered in understanding Asian American women’s body image development and internalization of Western ideals of beauty.

The sample consisted of 59 Asian American college women recruited from a variety of courses and campus organizations including ethnic studies classes and ethnic associations such as the Asian Pacific American Student Union (Lau et al., 2006). The participants identified themselves as Japanese (23%), Hmong (15%), Chinese (13%), Filipino (12%), Korean (8%), and Chinese-Japanese (10%). The remaining participants

identified as other Asian heritage groups such as Mien, Vietnamese, Thai, and Indian. Overall body image and satisfaction were assessed by a synthesis of items from the Body Parts Satisfaction Scale (BPSS) and the Body Comparison Scale-Female (BCS-F). The SATAQ-3 was used to assess the influences of media images, and the participants were also asked the amount of time they spent watching television. The instrument utilized to examine values acculturation was the Asian Values Scale (AVS).

The researchers found significant associations between acculturation and overall body image, along with relationships between media influence and overall body image. There was a strong link between media influence and body image but the amount of television viewing in which the participants engaged had no relationship to body image. Indirectly, this supports the perspective that images of attractiveness conveyed by television actresses may have less of an impact on women's physical and appearance self-concepts than do the idealized images in fashion magazines and advertisements. Lau et al. (2006) acknowledged that their research did not examine the types of television shows the women preferred. They also suggest that high self-esteem and less inclination to make social comparisons might also have buffered against the potentially adverse effect of idealized Western images conveyed in television programming.

Family income had no significant association with body image although the participants came mainly from middle- and upper-middle-class backgrounds without much variation in income status. One finding (B. Kim, Atkinson, & Yang, 1999) that contradicted the theory proposed by Lau et al. (2006) was that women whose values corresponded more strongly to traditional Asian values displayed a greater degree of body dissatisfaction than those who were more acculturated. Kim et al. (1999) suggest

that this may reflect the use of the AVS to capture Asian values orientation. One implication of this finding is that a desire to conform to cultural norms may predispose Asian American women to body dissatisfaction in a culture in which their own appearance clearly departs from the dominant cultural image. Another possibility raised by Lau et al. (2006) is that women with traditional Asian values, such as modesty and humility, might regard the expression of positive feelings about their appearance as “boastful and conceited,” leading to the potentially erroneous conclusion that these women have a disturbed body image (p. 269).

In fact, Lau et al. (2006) propose that women with traditional Asian values may be less susceptible to the effects of idealized Western beauty standards and instead cherish Asian facial features and body shape as uniquely attractive. From this perspective, Asian American women with more traditional cultural values and a favorable view of Asian standards of beauty may be more inclined to make social comparisons with women of their own ethnic heritage. Ironically, the focus on iconic Western images of female beauty and the predominance of research with Caucasian samples downplays the prospect that Asian American women who express dissatisfaction with their appearance may be comparing themselves to Asian beauty ideals. There is widespread availability of Asian magazines and television programming in North America and these may be preferred by women whose values are aligned more closely with Asian culture.

In addition to calling for research into the effects of acculturation on Asian American women’s body image, Lau et al. (2006) deem it essential to explore the extent that Asian American women compare themselves to Western and Asian ideals of beauty. While Evans and McConnell (2003), for example, found that Asian American women

tend to compare themselves to European American women, their research did not examine acculturation. According to Lau et al. (2006) their findings highlight the complexities that underlie body image perceptions in Asian American women. Both women who were more Asian and women who were more Western in values orientation exhibited body dissatisfaction, albeit through different dynamics.

Baugh et al. (2010) suggest that although strong ethnic identity appears to protect African American women from societal pressure toward thinness to an extent, they are not immune to body dissatisfaction or disturbed eating patterns. They point out that research on the relationship between ethnic identity and the development of eating disorders has produced mixed results. For their own study, Baugh et al. (2010) investigated ethnic identity, body image, and attitudes and behaviors related to eating disorders in two groups of undergraduate women. One group was recruited from a predominately White university and the other from a smaller historically Black university. The total sample was composed of 118 women, with African American women representing slightly more than 40% of the sample. More than 80% of the participants were in their first or second year of college.

The MEIM was used to assess ethnic identity. In addition to the body dissatisfaction subscale of the Eating Disorders Inventory-2, Baugh et al. (2010) presented the participants with the Contour Drawing Rating Scale which consists of nine female and nine male drawings that gradually expand in size. The scale is used to gauge discrepancies between individuals' perceptions of their present body size and their ideal body size. In the final analysis, there were very few differences between the responses of the White and African American women. While the White participants expressed a

greater degree of body dissatisfaction than did the African American participants, the body dissatisfaction subscale scores resulted in scores quite similar for both groups. Additionally, both groups of women expressed dissatisfaction in comparing their actual to their ideal body shapes on the Contour scale, but the scores of both groups were low or very low (typical of findings in nonclinical populations). As expected, however, the women who had higher scores on the Contour scale also displayed higher levels of body dissatisfaction. Adding to the similarities, there were no significant differences between the White and African American women on ethnic identity.

### **Social Comparison Theory**

The Social Comparison Theory proposes that individuals have a drive to determine their advancement and standing in life, and as a result they search for a standard that they can compare themselves to (Festinger, 1954). According to Festinger (1954), there are two types of social comparison: upward social comparisons and downward social comparisons. Upward social comparisons occur when humans compare themselves to others who they believe are better off than themselves. Whereas in downward social comparisons, humans compare themselves to others who they believe are worse off than themselves. Festinger (1954) suggested that upward comparisons were likely to elicit negative consequences such as low self-esteem or for the purpose of this study body dissatisfaction. Additionally, downward comparisons would produce positive responses such as increased self-esteem or body satisfaction. With this in mind, we will now look at research in the area of body image and how it is affected by the Social Comparison Theory.

## **Impact of Media Images**

Evans and McConnell (2003) used Social Comparison Theory as a framework for examining the effects of idealized images of beauty conveyed by the media on the body images and self-esteem of 64 Caucasian, 52 African American, and 54 Asian undergraduate women attending Michigan State University. An array of assessment tools was used in this study. Choosing the Body Esteem Scale (BES) as one of their instruments, Evans and McConnell noted that the survey did not assess an individual's perception of being attractive. For this purpose, the researchers asked the participants to choose the model that they found most attractive out of three models and rate her attractiveness on a scale of 1 (*very unattractive*) to 9 (*very attractive*). They were then asked to rate their own attractiveness using the same scale. For further assessment, the respondents were shown pictures of Caucasian, Asian, and African American images and were queried on the extent they would like to look like each one. Other assessments included the Rosenberg Self-Esteem Scale, the Need for Uniqueness Scale, and an analysis of their ideal versus their actual self using items listed by each participant and the rating of importance they attached to each one.

The findings revealed very different patterns for the women of the two minority groups. While the Black women only compared themselves to women of their own ethnic group, the Asian women compared themselves to mainstream ideals of beauty, similar to the White women. One result of the differing patterns of social comparison was that the Black women exhibited the highest levels of self-esteem, a consistent finding in research (Roberts et al., 2006). In addition, Evans and McConnell (2003) found that the Black women also had higher levels of body satisfaction as well as less need to conform than either the White or Asian women. The Asian women reported the strongest need to

conform, reflecting the value placed on collectivism and interdependence in Asian cultures. The desire to conform to the dominant culture can be especially harmful for the body image and self-esteem of Asian women, who also displayed the greatest discrepancy between their actual and ideal self (Fiske, Kitayama, Markus, & Nisbett, 1998; Marcus & Kitayama, 1991). Consistent with the overall pattern, this discrepancy was minimal for Black women.

Jefferson and Stake (2009) turned to Social Comparison Theory in their exploration of the effects of media ideals of beauty on the appearance self-concepts of 89 White and 80 African American women ranging in age from 18 to 30 attending a large Midwestern university. As their primary instrument, the researchers chose the Body Image Ideals Questionnaire (BIQ) because it encompasses aspects of physical appearance beyond those related to weight such as skin color, hair texture, facial features, and height. The BIQ also includes dimensions of athleticism such as muscle tone and definition, physical strength, and coordination which are typically neglected in research on women's body image. Other assessments included the Sociocultural Attitudes Toward Appearance Questionnaire Internalization (SATAQ-IN), social comparison practices, and BMI.

Consistent with most research, the White participants displayed significantly more dissatisfaction with their shape and weight. Jefferson and Stake (2009) emphasized that the African American women were more satisfied with their physical size and shape even though they were significantly larger than their White peers. In fact, the average BMI of the African American women fell into the overweight range whereas the White women tended to fall into the average range. Jefferson and Stake noted that the effect size for the ethnic differences in weight-related concerns paralleled the findings of Roberts et al.



(2006) and Grabe and Hyde (2006) in their meta-analyses, but controlling for BMI in their own study magnified the disparity. Compounding the effect, the White women not only saw themselves as farther from their ideal size and shape than did the African American women but they also attached greater importance to those facets of their appearance.

The overall findings suggest a tendency among African American women to reject European standards of beauty. The overwhelming majority of the African American women in this study were satisfied with their skin color (close to 84%) and appeared far less likely to internalize idealized media image or compare their appearance to those images.

At the same time, Jefferson and Stake (2009) asserted that the rejection of European standards of beauty may also carry negative implications for African American women. They propose that some Black women might reject White beauty ideals to preserve their self-concepts, but a negative consequence of that rejection may be the overweight they observed in the young African American women. There is evidence that the rate of obesity among African American women is double the rate for White women, with the risk of serious health consequences. According to their findings, Jefferson and Stake reported that some African American women appear to find refuge in the image of Black women that is large and strong; an image that goes back to the days of slavery and has negative physical and psychological implications. Psychosocially, they suggest that “acceptance of this ‘Mammy’ image can perpetuate the damaging myth of the oppressed yet resilient Black woman for whom adversity is natural, normal, and therefore, acceptable” (p. 406). Simply comparing Black women to White women on measures of

body image and satisfaction neglects to address the unique influence of sociocultural forces that may shape Black women's identities.

Jefferson and Stake (2009) also reported that there were no ethnic differences related to satisfaction with physical strength and coordination. Both groups of women, the Caucasian and African American women, awarded these factors moderate importance and both saw themselves as close to their ideals, which was expected among young adult women. For future research they would like to see greater attention given to additional factors related to body self-evaluation that extend beyond the traditional emphasis on appearance.

Frisby (2004) focused exclusively on African American women and exposed the participants to images of thin, attractive African American and White models in magazine advertisements. Social Comparison Theory served as the framework for the study. An exploratory study involving 48 women was initially conducted to discern how African American women responded to media advertisements showing White models. The participants were requested to list all the thoughts and feelings that emerged as they viewed the advertisements. The responses were classified into four categories focused on *beauty* (comments about the models' appearance), *product type* (relevance of the product to oneself), *relationship to self-concept* (such as "I want to look like that"), and "other" denoting comments that did not fit any of the three categories. Body esteem and mood were assessed before and after viewing the images.

The results revealed the African American women to be essentially unaffected by viewing images of attractive White models. Frisby (2004) also found that consistent with

other research, the African American women had higher body esteem and were more accepting of variations from media ideals than were White women.

Frisby's (2004) second study, encompassing 110 African American university women, involved eight experimental sessions conducted over 4 days in which the women viewed images of White and African American models. Overall, the women were more inclined to comment about the models' appearance than they were to appraise themselves in relation to the media images. Viewing the images of attractive African American women had the most striking effect on the women who had lower body esteem scores. The overarching finding was that African American women tend to limit their social comparisons to models of the same ethnic heritage. This comparison may have detrimental effects for African American women who have low body esteem.

### **Television Programs**

Schooler, Ward, Merriwether, and Caruthers (2004) note that there are two conflicting theories on the influence of media images on the self-image of Black women. On one side, some argue that being bombarded by messages that being beautiful means being thin *and* White could be even more damaging to the self-image of Black adolescent and young adult women than to their White counterparts. On the other hand, there is more empirical support for the theory that Black women tend to resist or ignore the thin White ideal given that most studies find that Black women are less concerned about weight and more satisfied with their bodies.

According to the Social Comparison Theory, the answer lies in the tendency of people to compare themselves to others with whom they can identify. In view of evidence that Black women tend to watch more television than do White women and thus

theoretically should be exposed to more images of the thin, White ideal (Greenberg & Brand, 1994), Schooler et al. (2004) proposed that television programming oriented toward Black audiences could play a role in the observed differences in body dissatisfaction between Black and White women.

To explore this issue, Schooler et al. (2004) compiled a list of 35 top-rated primetime TV dramas and sitcoms. For data gathered between the years 1999-2000, the TV shows came from the 1995-1996 television season. Information gathered from 2000-2001 time-span was based on TV shows seen during the 1996-1997 season. These particular seasons were chosen for several reasons. First, the young women surveyed were adolescents, a time of heightened susceptibility to sociocultural influences and social comparisons (Clay et al., 2005; Morrison et al., 2004). Second, there were several very popular shows with primarily African American casts on TV during those seasons (*Family Matters, Fresh Prince of Bel Air, Martin, Living Single, Hangin' with Mr. Cooper, Jamie Foxx, Moesha, The Smart Guy, the Wayans Brothers, and Sister, Sister*). The participants, 87 Black and 584 White college women between 17 and 22, were surveyed on their television viewing habits as well as on body image and ethnic identity (Schooler et al., 2004). The lack of a representative sample of Black participants could have confounded the results of this study. A larger sample of Black participants may have produced differing results. The body image items were drawn from the Eating Disorder Inventory (EDI), the BES, and the Body Shape Questionnaire (BSQ). The ethnic identity questions came from the MEIM (Phinney & Ong, 2007).

The findings showed that, as Schooler et al. (2004) anticipated, watching more hours of television during adolescence had a significant negative impact on the body

image of the White college women but not on the Black women even when watching the same popular shows and for the same number of hours. Watching Black-oriented TV shows tended to have a positive impact on the body image of the Black women but minimal influence on their White peers. These patterns are consistent with the principles of the Social Comparison Theory. Schooler et al.'s (2004) findings suggest increased television viewing has a negative impact on the body image of White adolescents but not on their Black counterparts.

Schooler et al. (2004) also point out that TV shows with predominately Black casts tend to have more actresses of various shapes and sizes. They also suggest that making upward comparisons, which tend to be detrimental to the self-esteem of White women, may be uplifting for Black women. That is, "Black women may see other Black women as allies, not as competitors, and may therefore find comparisons with other Black women, even with ideal media images, inspiring" (p. 44). They add that in view of the dearth of Black women on television for so many years, "the simple presence of Black female characters may affirm the beauty of Black women" (p. 44).

Schooler et al. (2004) also observed that the Black women who felt a stronger sense of ethnic identity had healthier body images. They suggest that identification with the African American community and with the Black characters portrayed on television shows may have rather overlapping benefits for young Black women. The overwhelming majority of the participants (95%) had ethnic identity scores above the median point and many reported a very strong sense of ethnic identity. The researchers suggest that watching TV shows with primarily Black characters may be especially beneficial for young Black women grappling with their ethnic identity.

Want et al. (2009) criticize the trend in research on media influences on women's body images for focusing on fashion magazines and television commercials to the exclusion of television programs. In fact, their own study and that of Schooler et al. (2004) are among the few that center on popular television programs. Want et al. (2009) suggest that television shows possibly have less an impact than do fashion magazines, which many women turn to for information on beauty and weight loss, comparing themselves to the models and the television commercials, which are created to elicit social comparisons in viewers. They speculate that a television show that attracts people because of the plot might have more of an indirect or incidental effect on body image than do the "decontextualized" female images in fashion magazines and advertising (p. 645). They also emphasize the importance of understanding the effects of television viewing given the amount of time people spend watching television.

Therefore, Want et al. (2009) focused on the influence of a single popular TV show: *Friends*. They selected the show due to its widespread popularity, especially among women, and because the show is known for portraying slim, attractive female characters. The researchers acknowledged that the cast of *Friends* was almost entirely White but for their study, which used an experimental design, they deliberately chose the episode *The One with the Soap Opera Party*, which features a slender, attractive African American woman. A second reason for choosing the episode is that there was no explicit emphasis on the appearances of the characters.

The participants in the Want et al. (2009) study were 76 Canadian female university students ranging in age from 18 to 26 years. The sample was ethnically diverse, with 45% of the students of European Canadian heritage (e.g., British, Italian,

Portuguese) and 35% of Asian Canadian heritage (e.g., Chinese, Korean, Filipino). The remaining participants were primarily African or Middle Eastern heritage. In their study, Want et al. (2009) used the Visual Analogue Scale (VAS) to assess the reactions of the participants, who viewed the first 10 minutes of the *Friends* episode. The VAS items used related to mood and personality. In addition, the participants were asked to rate the extent of their interest in *Friends* and gauge how often they watched the show.

The researchers also designed two “intervention scripts.” The first script, *Appearance Intervention*, described the various ways that actors’ facial features, skin tone, and hairstyles are manipulated through cosmetic techniques. The second script, *Weight and Shape Intervention*, elaborated on how the weight and physiques of television actors are not representative of the general population, the sometimes drastic strategies actors use to maintain their weight and shape, the health implications of low BMI, and the possible genetic influences on body weight. The overall purpose of the scripts was to convey the message that the images of women they see on television are unrealistic with the goal of nullifying or diminishing the basis for social comparison.

The participants were randomly assigned to an exposure group, a control group, an appearance intervention group, and a weight and shape intervention group. According to Want et al. (2009), the participants were not told the specific purpose of the study but rather that the study was on mood, personality, and enjoyment in watching the popular sitcom. The control group participants completed the questionnaire but were told to leave out the “interest” questions until after they viewed the clip of *Friends*. Through this strategy the women answered the questions on appearance and body satisfaction before being exposed to the media images. In contrast, the participants in the exposure group

viewed the show first and then answered the questions. The members of the two intervention groups read their respective materials first, then viewed the television clip, and last, completed the questionnaire. The results showed that for the women in the exposure group, watching the excerpt of *Friends* had a significant negative impact on satisfaction with their appearance.

Want et al. (2009) note that their study is the first to demonstrate that exposure to thin and very attractive women *can* have an adverse effect on women's appearance satisfaction "*even when the images are viewed in a medium that is primarily used for entertainment or enjoyment (television) and even when those portrayals are incidental to the context of the program [original emphasis]*" (p. 651). They emphasize the word "can" to negate any implication that this effect applies to other television programs or type of programs and call for further exploration of this line of research. As an explanation for why viewing the short excerpt should trigger social comparisons, Want et al. (2009) suggest that making social comparisons might actually be automatic or unconscious, noting that there is some evidence for this effect. At the same time, they assert that this does not imply that conscious mechanisms are not involved. Conscious reflection can intensify or diminish the impact of the initial spontaneous comparisons.

In fact, the marked impact of the Weight and Shape intervention illustrates that social comparison processes can be consciously altered. The Weight and Shape intervention was a reading on how the body weight and shapes of actors are not representative of individuals in the general population, the lengths that actors go to to maintain their weight, as well as health implications of low BMI. The appearance satisfaction of the women who read through the Weight and Shape Materials diverged



significantly from the exposure group and was similar to that of the control group. Want et al. (2009) observed a less powerful but nonetheless important effect for the Appearance intervention. Similar to the Weight and Shape interventions, the Appearance intervention consisted of readings on the numerous ways that the physical appearance of television actors is manipulated such as makeup, lighting, and other cosmetic techniques. The women who read the Appearance intervention scored between the control group and the exposure group on appearance satisfaction but were closer to the scores of the control group.

There were no statistically significant differences among the participants based on ethnicity. However, there were some notable trends that in some cases fell just short of significance (Want et al., 2009). In particular, the Weight and Shape intervention was a more positive influence for the European heritage participants than for the Appearance materials. Conversely, the Appearance materials had a more pronounced positive impact on the Asian heritage women, which is consistent with other research on the aspects of appearance that influence Asian women (Kennedy et al., 2004; Lau et al., 2006). Non-significant trends also showed that the Black and Middle Eastern women were less susceptible to the television portrayals.

Want et al. (2009) call for greater attention to individual differences in women's reactions to media interventions, noting that, "just as there is likely to be much individual variation in media images themselves, there is also likely to be variation in responsiveness to media interventions" (p. 653). Choice of media and levels of customary exposure, for example, are factors that influence the way women are affected by idealized standards of female beauty that have not been explored to a great extent.

## **Family Influences**

Sira and White (2010) explored body satisfaction in female and male college students, with attention to the interaction of factors of self-esteem, BMI, dieting behaviors, and perceptions of parents' control and care. The researchers note that students who enter college upon graduation from high school are still in the process of negotiating individuation and separation from their families. Minuchin, Rosman, and Baker (1978) argue that parents who are unduly controlling impede their children's development of individuality and independence. Sira and White (2010) find support for this theory in evidence linking perceived parental control with body dissatisfaction and eating disorders. Parents' attitudes also influence self-perceptions related to weight and body image either subtly or overtly (Birch, Fisher, & Davidson, 2003; Meyer & Gillings, 2004). The participants' perception of parental control and care was assessed via the Parental Bonding Instrument (PDI). Other instruments used for the study were the Self-Perception Profile for College Students, which has items related to body satisfaction and global self-esteem, and the Eating Attitude Test-26 (EAT). BMI was calculated using the standard formula. The sample of 348 college students was overwhelmingly female (86%). Though White students were a clear majority (75%), the sample was ethnically diverse including African American, Latino, Asian, Native American, and multiracial students.

Their study found that among the female students, body satisfaction was positively linked with self-esteem and inversely related to BMI, EAT scores, and both maternal and paternal control. Neither paternal nor maternal control was related to body satisfaction. Women with higher BMI showed more evidence of eating disturbances, which, in turn, were associated with lower self-esteem. Sira and White (2010) noted that

the influence of fathers on their daughters' development has only recently become a focus of study. In particular, studies of family influences on females' body image and eating behaviors typically concentrate on mothers' attitudes and behavior. Both maternal and paternal care were associated with higher self-esteem while maternal and paternal control predicted lower self-esteem.

Similar but not identical patterns emerged for the male students. Among the men, body satisfaction was positively linked with self-esteem and maternal and paternal care and inversely related to BMI and EAT scores. As with their female counterparts, the male students with higher BMIs showed more evidence of eating disturbances. For the men, however, only paternal care and control were related to BMI, with higher BMI related to stronger paternal control and lower paternal care. Not surprisingly, self-esteem was associated with both paternal and maternal care.

In using regression analysis to determine the most significant influences on body satisfaction for each gender, Sira and White (2010) found a more complex interaction of factors in the body satisfaction of the female students. While BMI, self-esteem, maternal control, and total EAT scores emerged as the most significant contributors to body satisfaction among the women, for the men only the BMI and self-esteem remained significant in the final analysis. According to Sira and White, their findings for both genders highlight the powerful role of BMI in body satisfaction, especially for college-age young adults. They also stress the interrelationship of body satisfaction and self-esteem, noting that body satisfaction is an integral component of global self-esteem for both genders.

## **Religiosity**

Although body image has been studied in relation to media influences and family influences, religiosity has also received attention. A recent review concluded that religiosity and body image are linked in positive and healthy ways (Boyatzis & Quinlan, 2008). For instance, greater body satisfaction is positively correlated with women's self-reported importance of religion (Joughin, Crisp, Halek, & Humphrey, 1992), self-rated religiosity and worship attendance (Mahoney et al., 2005), and religious well-being such as a close relationship with God (Smith, Hardman, Richards, & Fischer, 2003).

Additionally, in highly religious women, prayer was shown to be an effective coping skill in dealing with body image concerns (Jacobs-Pilipski, Winzelberg, Wilfley, Bryson, & Taylor, 2005). Further support for the positive role of religion comes from qualitative research which shows that when women express whether religion affects their body image, the impact is typically positive, although many women report no such connection (Boyatzis, Kline, & Backof, 2007).

Pargament and Mahoney (2005) postulate that sanctification (the process of endowing some aspect of life with divine and sacred significance) is another dimension of religiosity that may be related to body image. Mahoney et al. (2005) measured college students' body image in relation to the degree that they viewed their bodies as being a manifestation of God ("My body is created in God's image") and described their bodies as having sacred traits. In their study a significant portion of variance in body satisfaction was predicted by the participants' scores on sacred traits; that is, the more the participants felt their bodies had special qualities ("heavenly"), the more satisfied they were with their body image. It is important to note that scores on the manifestation of God in the body was not predictive of body image.

Additional support for this contention comes from Weinberger-Litman (2008) who examined body image, disordered eating, religious orientation, spiritual well-being, and sociocultural factors in 301 Jewish women in New York City. The author found that females with an intrinsic religious orientation (internalize and live their religious beliefs) had lower scores (indicating less pathology) on body image, eating disturbance, internalization of the thinness ideal, and social comparisons compared to individuals with extrinsic, pro-religious, and anti-religious orientations. Weinberger-Litman (2008) suggests that having a high spiritual well-being and/or internalizing one's religious beliefs can guard against the development of a negative body image and an eating disorder.

Odoms-Young (2008) also examined the relationship between body image and religiosity in 22 African American Suni Muslim women. Using a qualitative method, the author investigated body image, food consumption, cultural identity, social roles, religious involvement, and religious beliefs among the women. From the interviews, Odoms-Young (2008) found that women with high religiosity scores placed greater emphasis on their spiritual self rather than on physical appearance. Additionally, females who were more religious appeared more tolerant of people who were overweight due to the belief that people should be not be judged on their physical characteristics but on other attributes such as spirituality. Further, the author suggests that for some women, self-esteem and a more positive body image might be attributed to a relationship with God.

K. Kim (2007) examined the relationship between religion and weight perception (being overweight, underweight, or normal weight) in 3,032 adults who ranged in age

from 25 to 74. Data were obtained from the National Survey of Midlife Development in the United States which is a cross-sectional study that examined how adult life changes are related to physical, psychological, and social health. K. Kim (2007) explored the relationship between weight perception and the following religion variables: denomination, religious attendance/practice, religious social support, religious commitment, religious application, and religious identity. Results indicated that, for women, there was a significant relationship between weight perception, religious commitment, and religious identity. Women who reported higher religiosity were more likely to underestimate their weight. Additionally, women who reported greater religious application were more likely to overestimate their weight compared to women with lower levels of religious application.

Joughin et al. (1992) examined the impact that religious beliefs have on body image concerns among 851 individuals diagnosed with Anorexia Nervosa. Members of the Eating Disorders Association (a self-help organization for individuals with eating disorders located in the United Kingdom) were mailed packets containing the Eating Disorder Inventory and the Religious Belief Questionnaire. Of the 2,300 packets mailed, 851 were completed and returned. The final sample was limited to those who espoused to a common religious group or had no religion. The final sample was composed of 232 Anglican, 97 Roman Catholic, 51 Free Church of England, and 204 who declared no religion. Participants with a religious affiliation had lower BMI than those without religion. The authors found a small correlation between increasing Drive for Thinness and decreasing importance of religion. Individuals who placed less importance on religion had a greater drive to conform to the thinness ideal.

In addition to correlational studies, an experimental study was conducted recently which also demonstrated the positive effect of religion on body image (Boyatzis et al., 2007). In this study, undergraduate females viewed photographs of ultra-thin fashion models in order to activate their body image concerns. Then the participants read either neutral statements, religious body affirmations (“My body is perfect because it was created in God’s image), or spiritual body affirmations (“My body is perfect”). In a pre-test/post-test measure of body satisfaction, the women who read neutral statements declined in body image while the women who read religious body affirmations significantly improved on body image.

In summary, religiosity has been shown to be a contributing factor in greater body satisfaction among women (Odoms-Young, 2008; Weinberger-Litman, 2008). Research has shown that individuals who displayed more religiosity were more satisfied with their bodies (Boyatzis et al., 2007; Mahoney et al., 2005). Thus, religious orientation and similar lifestyles may contribute to greater body image satisfaction. Further research is needed to confirm this hypothesis.

### **Conclusion**

Recognition that concerns about body image and body dissatisfaction are not just a problem of young Western White women is a fairly recent phenomenon. An extensive body of international and cross-cultural literature documents its existence across national and cultural boundaries and among both genders (Holmqvist & Frisen, 2010). However, most research is still conducted with Caucasian women. Studies of sociocultural influences involving African American women suggest that they are more likely to compare themselves to their own ethnic group than to idealized media images of slender

White models (Frisby, 2004; Jefferson & Stake, 2009; Schooler et al., 2004). Most studies find that compared to White women, African American women have higher body esteem, which may be a reflection of higher self-esteem (Grabe & Hyde, 2006). There is also some evidence that differences between White and African American women in some aspects of body image and satisfaction may be dissipating.

Strong ethnic identity has been found to protect African American women from body dissatisfaction in some studies (Henrickson et al., 2010; Wood & Petrie, 2010) but not in others (Baugh et al., 2010). For Latinas, familism may have more impact on body image than the broad ethnic identity (Bettendorf & Fischer, 2009). Research findings on Asian American women tend to be mixed. Asian American women may be more concerned with their facial features than with their body type (Cummins & Lehman, 2007; Kennedy et al., 2004; Lau et al., 2006). In some studies it is not clear whether Asian American women are comparing themselves to a slender Western ideal or to more petite Asian heritage women. Multicultural and cross-cultural research on body image is still in its infancy. The development of sophisticated models that include facets of ethnic identity provide greater understanding, but there continues to be a need for more qualitative and quantitative research.



## CHAPTER 3

### RESEARCH DESIGN AND METHODOLOGY

Research on the relationship between ethnic identity and body image has been plentiful; however, the results from these studies have been either inconclusive or contradictory. The purpose of this study was to examine the relationship between body image and ethnic identity in undergraduate females. Additionally, possible correlates of body image dissatisfaction including internalization of the thinness idea, socio-cultural pressure, and religious commitment were explored.

This chapter describes the dissertation design and methodologies used to evaluate the research questions and hypotheses posed in Chapter 1. First, the research design is presented, with the study's sample composition, analytical measures, procedures described, and research questions reviewed. The chapter concludes with a brief introduction to the data analysis that will be discussed fully in the following chapter.

#### **Research Questions**

The main study proposed the following research questions:

1. To what extent is body image related to ethnicity, where body image is measured by Appearance Evaluation subscale, Body Satisfaction subscale, Overweight Preoccupation, and Self-Classified Weight subscale?
2. To what extent is ethnic identity related to ethnicity?

3. To what extent is ethnic identity related to generational distance from original land of origin?

4. To what extent is body image (as measured by Appearance Evaluation subscale, Body Satisfaction subscale, Overweight Preoccupation subscale, and Self-Classified Weight subscale) related to ethnic identity (as measured by the Ethnic Identity Scale), internalization of the thinness ideal (as measured by the Internalization-General subscale and Internalization-Athletic subscale), sociocultural pressure (as measured by the Sociocultural Pressures Scale) and religious commitment (as measured by the Religious Commitment Inventory-10)?

### **Research Design**

The survey is a widely used research method in the areas of psychology, education, political science, business, and marketing (Zhang, 1999). It is a method of gathering data from respondents thought to be representative of a population, using an instrument composed of open-ended questions or a closed structure (Elmes, Kantowitz, & Roediger, 1992). There are four basic types of surveys: face-to-face interviewing, mail surveys, telephone surveys, and web-based or internet surveys (Andrews, Nonnecke, & Preece, 2003).

The first survey method used in this study was the mail survey. This type of survey is often the best choice for sensitive items and there is no interviewer bias (which may arise in face-to-face interviews). Additionally, mail surveys are often used for short instruments. Mail surveys can be a poor choice for open-ended questions. Additional limitations include lack of control over respondent interaction with unknown others while

taking the survey which may cause bias. Lastly, mail surveys are often slower than other survey methods such as telephone interviews or web-based surveys (Elmes et al., 1992).

Web-based surveys are becoming an increasingly popular mode of data collection (Andrews et al., 2003). Web surveys are often the least expensive to administer and can be rather fast in terms of data collection. Internet or web-based surveys can be administered to large populations. Additionally, web-based surveys can support complex survey designs. The main limitation to internet surveys is the near impossibility of obtaining random samples as web access is known to be biased by race, income, gender, and age. Lastly, web-based surveys are not optimal for open-ended questions or long instruments (Andrews et al., 2003; Zhang, 1999).

For the current study, both mail surveys and web surveys were used in order to reach the greatest number of students. Additionally, both the web-based and mail surveys were fairly short in length and contain closed-structured questions. Through the use of survey research, information was obtained on the following variables: Appearance Evaluation, Body Areas Satisfaction, Self-Classified Weight, Overweight Preoccupation, Internalization-General, Sociocultural Pressure, Ethnic Identity, and Religious Commitment.

### **Participants**

The target population for this study included undergraduate females from the following ethnic groups: Caucasian (European descent), African American, Asian/Asian American, Hispanic American, and West Indian/Caribbean. Andrews University has a very diverse population. Table 1 provides a comparison of the ethnic composition of the current sample and the Andrews University population as reported by the Board of

Trustees Report (October 2010). As can be seen from this table, the ethnic composition for both the current sample and the Andrews University population are comparable. For example, Andrews University is composed of 28% Black students and the current sample contains 26.7% Black participants. These are very comparable numbers. The percentages for the other ethnic groups surveyed are also comparable to the general population at Andrews University. Thus the current sample was representative of the population at Andrews University.

Table 1

*Population and Sample Comparison Based on Ethnicity*

Ethnicity	% Andrews University population	% current sample
White	41	43.5
Black	28	26.7
Asian	11	12.5
Hispanic	16	14.8
Multiple-ethnicities	2	2.6
Pacific Islander	1	NA
Unknown	1	NA

Participants were recruited through the female residence hall as well as an advertisement in the Andrews University campus online newsletter. The population of the study was undergraduate females at Andrews University. All female undergraduate students were given opportunities to participate in this study either through the online version or via paper versions of the survey.

Over a 6-week period, paper surveys were distributed to 583 female undergraduates residing in the female residence hall. Additionally, over the same 6-week period, an advertisement was placed in the Andrews Agenda which provided a link to the on-line version of the survey. A total of 357 surveys were completed (130 paper-based, and 225 web-based). Twelve surveys were discarded due to excessive missing data or participant did not meet criteria for the study. This left a total of 345 participants with completed protocols. Using a 95% confidence level and a confidence interval of +/- 5, the needed sample size for this study given that the female undergraduate population for Andrews University was 1,069 for the 2010-2011 school year is 283. The final sample of 345 is adequate to obtain statistical power. A detailed description of the sample of this study is provided in Chapter 4.

### **Pilot Study**

#### Purpose

A pilot study was conducted in September 2009 to identify and address potential problems with the survey, redundancy of questions and scales, data collection procedures, and data analysis. A secondary aim of this pilot study was to begin evaluating the relationship between body image, ethnic identity, internalization of the thinness ideal, and sociocultural pressure.

#### Method

The pilot survey was tested with a sample of 140 undergraduate females ages 16 to 49 years old (mean 20.65, *SD* 3.86). Specifically, the sample consisted of: 65 (46.8%) Caucasian Americans, 13 (9.3%) African Americans, 18 (12.9%) West

Indian/Caribbeans, 24 (17.1%) Hispanic Americans and 20 (14.4%) Asian/Asian Americans.

The pilot study was conducted over a 3-day period and targeted undergraduate females residing in the campus dormitory as well as females enrolled in psychology and business classes. In the undergraduate classes, females were asked to participate in a 30-minute study on female body image. Participants were informed that participation was voluntary and they could drop out at any time and were instructed to answer the questions as honestly as possible. The participants were asked to sign an informed consent form and were then given a packet containing a demographic questionnaire and the pertinent scales from The Multidimensional Body-Self Relations Questionnaire–Appearance Scales, The Sociocultural Attitudes Toward Appearance Questionnaire-3, The Perceived Sociocultural Pressure Scale, and The Multigroup Ethnic Identity Measure. Table 2 provides data on the number of items in each scale as well as the Cronbach’s Alpha (reliability) of each scale. Anonymity was preserved in that the participants did not give their names on the answer sheet. A written debriefing form describing the nature of the study was provided after the packets were collected.

In the women’s residence hall, packets containing a letter inviting students to participate in a 30-minute study on women’s body image, an informed consent form, a demographic questionnaire, and the pertinent scales from The Multidimensional Body-Self Relations Questionnaire-Appearance Scales, The Sociocultural Attitudes Toward Appearance Questionnaire-3, The Perceived Sociocultural Pressure Scale, and The Multigroup Ethnic Identity Measure were placed in each resident’s mailbox. The letter informed students that their involvement in this study was voluntary and if they agreed to

Table 2

*Summary of Measurements: Pilot Study*

Scale	<i>N</i>	# of items	Cronbach's alpha
Appearance evaluation	140	7	0.88
Appearance orientation	140	12	0.85
Overweight preoccupation	140	4	0.76
Self-classified weight	140	2	0.89
Body satisfaction (BASS)	140	9	0.73
Ethnic identity	140	12	0.80
Affirmation, belonging and commitment	140	7	0.80
Internalization-general	140	9	0.90
Internalization-athletic	140	5	0.90
Sociocultural pressure	140	10	0.88

participate to please complete the packets within 3 days. Additionally, the letter instructed students to place the completed questionnaires and signed informed consent forms in the boxes labeled “Completed Surveys” and “Consent Forms,” respectively, located at the front desk of the residence hall. To preserve anonymity, participants were instructed not to write their names anywhere on the questionnaire. Completed packets and consent forms were picked up by the researcher at 8 p.m. on the third day. A written debriefing form was placed in each resident’s mailbox. The debriefing form was necessary as body image concerns could bring up feelings of sadness or anxiety. It was necessary to inform the participants that if they begin to experience these feelings to contact the Counseling and Testing Center on campus.

### Results

Results from the pilot study provided insight into the relationship between body image, ethnic identity, internalization of the thinness ideal, and sociocultural pressure among undergraduate females at a Seventh-day Adventist university. It also brought up

additional questions mainly surrounding the lack of differences among the ethnic groups in terms of body image. Previous research suggests that African Americans and Hispanics are less dissatisfied with their bodies compared to Caucasians (Cash, Melnyk, & Hrabosky, 2004; S. Harris, 1994; Henriques et al., 1996; Shaw et al., 2004; White & Grilo, 2005). Results from this study did not support this contention.

The results of the pilot study led me to omit the following scales from the final study: the Appearance Orientation scale of the Multidimensional Body-Self Relations Questionnaire-Appearance Scale (MSBRQ-AS), the Internalization-Athletic scale of the Sociocultural Attitudes Toward-Appearance Questionnaire (SATAQ-3), and the Affirmation, Belonging and Commitment scale of the Multigroup Ethnic Identity Measure (MEIM). These scales were omitted for the following reasons: lack of useful information and similar information was obtained using the following subscales:

Appearance Evaluation scale of the Multidimensional Body-Self Relations Questionnaire-Appearance Scale (MSBRQ-AS), the Internalization-General scale of the Sociocultural Attitudes Toward-Appearance Questionnaire (SATAQ-3), and the Ethnic Identity scale of the Multigroup Ethnic Identity Measure (MEIM).

The first subscale that was omitted from the final study was the Appearance Orientation scale of the Multidimensional Body-Self Relations Questionnaire—Appearance Scale (MBSRQ-AS) due to lack of useful information. This scale measures the extent of investment in one's physical appearance or the value placed on "looking good." This scale consists of statements related to grooming and choice of clothing such as *I take special care with my hair grooming*, or *I am careful to buy clothes that will make me look my best*. Upon review, this scale did provide useful information on being



conscientious toward appearance; however, it provided no insight into body image concerns. Information on body image concerns were better obtained through the use of the Appearance Evaluation scale of the Multidimensional Body-Self Relations Questionnaire-Appearance Scale (MBSRQ-AS) which measures an individual's satisfaction with overall appearance. This scale contains statements such as: *My body is sexually appealing*, or *I like my looks just the way they are*. The Appearance Evaluation scale is a more appropriate scale to use in order to obtain useful information on body image concerns.

The second scale that was omitted from the final study was the Internalization-Athletic scale of the Sociocultural Attitudes Toward-Appearance Questionnaire (SATAQ-3). This scale measures the extent that an individual endorses and accepts the athletic and “toned” body ideal and consists of statements such as *I compare my body to that of people in “good shape,”* or *I wish I looked as athletic as sports stars*. Information from this scale can also be gathered through the Internalization-General scale of the Sociocultural Attitudes Toward-Appearance Questionnaire (SATAQ-3). The Internalization-General scale assesses the extent to which an individual endorses and accepts media messages that promote unrealistic ideals for female beauty and striving to meet those needs. This scale contains statements such as: *I compare my body to the bodies of people on TV* or *I compare my appearance to the appearance of people in magazines*. Since questions on the Internalization-General scale addresses media ideals including thin and toned actresses, models and athletes, it is unnecessary to ask questions specifically endorsing athletic physiques.

The last scale that was omitted from the final study was the Affirmation, Belonging and Commitment subscale of the Multigroup Ethnic Identity Measure (MEIM). This scale assesses ethnic pride, feeling good about one's background, being happy with one's group membership, and feelings of belonging and attachment to the group. Statements of this subscale consist of the following: *I have a strong sense of belonging to my own ethnic group, or I feel good about my cultural or ethnic background.* Questions on the Affirmation, Belonging and Commitment subscale are also incorporated into the Ethnic Identity Scale of the Multigroup Ethnic Identity Measure (MEIM) so it was deemed unnecessary to use both scales.

Results from the pilot study did not support previous research which states that African Americans and Hispanic Americans are less dissatisfied with their bodies compared to Caucasians (Cash, Melnyk, et al., 2004; Shaw et al., 2004; White & Grilo, 2005). To review, results from the pilot study found similar levels of body dissatisfaction among participants regardless of ethnicity. This led me to hypothesize that despite ethnic differences this sample may be more homogenous rather than heterogeneous in terms of personal characteristics such as religiosity. Previous research has suggested that individuals with a high religious faith are more satisfied with their bodies than are individuals with low religiosity (Boyatzis et al., 2007; Mahoney et al., 2005). Since Andrews University is a flagship of the Seventh-day Adventist Church, it was hypothesized that individuals with higher religious commitment will have more body satisfaction than those with little religious commitment. To test this hypothesis, the Religious Commitment Inventory-10 (RCI-10) was added to the final study.

The pilot study provided useful information, not only on the survey questions and scales but also by raising new questions regarding the body image of undergraduate females at a Seventh-day Adventist university. A new question as to how the participants' religious experience also affected their body image needed to be explored further. Thus, the information obtained through the pilot study helped to further develop how the proceeding study would be actualized.

## **Measures**

### Demographic Questionnaire

The demographic information questionnaire used for this study was developed by me. It surveyed information concerning age, year in school, marital status, ethnicity, religious affiliation, and generational distance from original land of origin. Participants were asked to either fill in the blank or check the appropriate box in response to each question.

### Body Image

Body Image was assessed using The Multidimensional Body-Self Relations Questionnaire—Appearance Scale (MBSRQ-AS; Cash, 2000). The MBSRQ-AS is a 34-item self-report inventory that measures evaluative, cognitive, and behavioral dispositions toward the physical self. The MBSRQ-AS uses a 5-point response scale ranging from 1 (*definitely disagree* or *very dissatisfied*) to 5 (*definitely agree* or *very satisfied*). It has been designed for use with adolescents over the age of 15 and adults. Due to the multidimensional elements of body image assessment included in the MBSRQ-AS, it has been used extensively in studies with college students (Cash & Pruzinsky, 2002).

The MBSRQ-AS is composed of five subscales that yield separate scores for each. The first subscale, Appearance Evaluation, assesses an individual's satisfaction or dissatisfaction with overall appearance. High scores are associated with greater positive feelings about one's appearance while low scores indicate dissatisfaction with one's overall appearance. The second subscale, Appearance Orientation, measures the extent of investment in one's physical appearance, or the value placed on one's physical appearance and the investment one makes on "looking good." High scores represent a greater level of importance on appearance, greater attention paid to their appearance, and a greater level of engagement in grooming behaviors, while low scorers are indifferent about their appearance and do not expend much effort to "look good." The third subscale, Overweight Preoccupation, measures excessive concerns about being overweight. Individuals with high scores are more preoccupied with their weight and body fat, whereas those with low scores show little concern about these issues. The fourth subscale, Self-classified Weight, measures how one perceives and labels one's weight from very underweight to very overweight. High scores indicate a classification of being overweight while low scores indicate being underweight. The last subscale, Body Areas Satisfaction (BASS), measures specific aspects of one's physical appearance including skin complexion, facial features, hair texture, and specific areas of the body (e.g., legs, mid-torso, and upper torso). High scores indicate that the individual is generally content with most areas of their body, while low scores are indicative of individuals who are generally dissatisfied with many areas of the body.

The MBSRQ-AS has reported reliability coefficients ranging from .73 to .91. Cash (2000) reported reliability coefficients (Cronbach's alpha) and one month test re-

test for college females as follows: Appearance Evaluation (.88, .91), Appearance Orientation (.85, .90), Overweight Preoccupation (.76, .89), Self-classified Weight (.89, .74), and Body Areas Satisfaction (.73, .74). Recall that as a result of the pilot study, the Appearance Orientation subscale was omitted from the final study as it did not provide any useful information. All of the instruments' subscales have demonstrated strong convergent, discriminant, and construct validities as confirmed by a cross-validated components analysis conducted by Brown, Cash, and Mikulka (1990).

### Internalization of the Thinness Ideal

Internalization of the thinness ideal was assessed using the Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ-3). The SATAQ-3 is a 30-item measure that uses a 5-point Likert scale to assess an individual's attitudes toward appearance on four domains: (a) Internalization-General, (b) Internalization-Athlete, (c) Pressures, and (d) Information. Scores range from 1-5, where 1 = *definitely disagree*, 2 = *somewhat disagree*, 3 = *neither disagree nor agree*, 4 = *somewhat agree*, 5 = *definitely agree*. Scores range from 38-190. Higher scores correspond to a greater subscription to the thin ideal.

For the purpose of the main study, only one subscale was assessed:

Internalization-General. Internalization-General is comprised of nine items that indicate endorsement and acceptance of media messages that promote unrealistic ideals for female beauty and striving to meet these ideals. The pilot study assessed two subscales: Internalization-General and Internalization-Athletic. Internalization-Athlete is comprised of five items that indicate endorsement and acceptance of an athletic and "toned" body ideal. High scores on both scales indicate greater internalization of the thinness ideal.

Both of these scales assess the incorporation of appearance standards promoted by the media into one's identity, to the point that the individual strives or desires to meet the ideals. The subscales Pressure and Information were not used in this study as these data were ascertained using the Perceived Sociocultural Pressures Scale.

The SATAQ-3 was developed to extend and update the measure of sociocultural influence on body image developed by Thompson and colleagues in 2003. This was accomplished by including athleticism, exploring media influences such as societal pressure to be thin, and evaluating the internalization construct with the Ideal Body Internalization Scale, Revised (IBIS-R).

The SATAQ-3 was evaluated using two studies (J. Thompson, Van den Berg, Roehrig, Guarda, & Heinberg, 2004). The first study assessed 175 female undergraduates (ages 17-25) from the University of South Florida. Participants in the second study included 195 undergraduate females (ages 18-22) from the University of South Florida and 15 females (mean age 23.4) in an inpatient setting with eating disorders from Johns Hopkins Hospital in Baltimore, Maryland. A factor analysis was used to develop distinct constructs. Results indicated that the internalization items loaded cleanly into one factor (J. Thompson et al., 2004). IBIS-R formed a distinct factor from the internalization factor, and loaded somewhat with the awareness items. Additionally, Information, Pressures, and Athlete Internalization emerged as distinct areas of media influence (J. Thompson et al., 2004).

The second study was conducted to evaluate the variability of the SATAQ-3 (J. Thompson et al., 2004). As previously stated, the second study was comprised of 195 undergraduate females from the University of South Florida and 15 females with a

diagnosable eating disorder who were at an inpatient psychiatric unit. Participants were assessed body image using the SATAQ-3 and two subscales of the Eating Disorder Inventory, Body Dissatisfaction and Drive for Thinness. Results indicated good variability and overall reliability. Specifically, Internalization (General and Athlete), Pressures, and Information all contributed uniquely to the variance. Internalization ( $t = 6.02, p < .0001$ ) uniquely contributed to 11% of the variance. Pressures ( $t = 5.33, p < .0001$ ) uniquely contributed to 9% of the variance. Information ( $t = -1.99, p < .048$ ) uniquely contributed to 1% of the variance. The internal consistency (Cronbach's alpha) for the overall scale is .95 (J. Thompson et al., 2004).

#### Sociocultural Pressure

Sociocultural Pressure was assessed using the Perceived Sociocultural Pressure Scale (PSP). This scale was developed by Stice and Argas (1998) and is comprised of eight items that assess perceived pressure by family, friends, romantic partners and the media to conform to the thinness ideal. This measure uses a 5-point Likert scale. Scores range from *none* (1) to *always* (5) and are computed by summing and calculating the mean. Higher scores indicate greater frequency of perceived pressure to be thin from the media and people in one's environment. This measure has excellent internal consistency ( $\alpha = .88$ ), and has been shown to have adequate reliability and predictive validity (Stice, 2001; Stice & Argas, 1998).

#### Ethnic Identity

Ethnic identity was assessed using the Multigroup Ethnic Identity Measure (MEIM). The Multigroup Ethnic Identity Measure was developed by Phinney (1992) and is comprised of 12 items that assess the extent to which participants identify with and

take pride in their racial or ethnic group. The MEIM is comprised of two factors that are measured on a 4-point scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The first subscale Ethnic Identity is defined as a continuous variable that ranges from a lack of exploration and commitment (low interest and awareness and little clarity concerning one's ethnicity) to evidence of both exploration and commitment that is reflected in efforts to learn more about one's background and a clear understanding of the role of ethnicity for oneself. High scores are indicative of ethnic identity achievement, whereas low scores indicate ethnic identity diffusion.

The second subscale Affirmation, Belonging and Commitment is an affective component. It assesses ethnic pride, feeling good about one's background, being happy with one's group membership, and feelings of belonging and attachment to the group. High scores are indicative of individuals who have increased levels of ethnic pride and generally have positive feelings towards their ethnic group, while low scores are indicative of individuals with little ethnic pride and have negative feelings toward their ethnic group. Scores are obtained by reversing negatively worded items, summing across items, and calculating the mean. Calculated scores range from 4 (high ethnic identity) to 1 (low ethnic identity). The MEIM has shown good reliability, typically with coefficient alphas above .80 across a variety of ethnic groups and age ranges (Phinney, 1992).

Recall that in the final study only the Ethnic Identity Scale was used as questions from the Affirmation, Belonging and Commitment subscale are also answered by this scale.



## Religious Commitment

Religious Commitment was assessed using the Religious Commitment Inventory-10 (RCI-10) (Worthington et al., 2003). The Religious Commitment Inventory-10 is a 10-item scale that assesses individuals' religious commitment, defined by the authors as "the degree to which a person adheres to his or her religious values, beliefs, and practices and uses them in daily living" (p. 85). The RCI-10 uses a 5-point scale ranging from 1 (*not at all true of me*) to 5 (*totally true of me*). High scores indicate a high level of religious commitment while low scores indicate low levels of religious commitment. Based on six studies with a variety of sample sizes and demographics, the RCI-10 was found to have two factors: Intrapersonal Religious Commitment and Interpersonal Religious Commitment. Intrapersonal Religious Commitment is comprised of six items that focus on cognitive aspects such as religious attitudes and beliefs. Interpersonal Religious Commitment is comprised of four items that focus on behavioral aspects such as church attendance or private prayer. The Intrapersonal Religious Commitment factor accounted for 62% of the common variance and the Interpersonal Religious Commitment factor accounted for 10.1% of the common variance. The alpha coefficient for the full RCI-10 scale was .93, for the Intrapersonal scale it was .92, and for the Interpersonal scale it was .87. The Intrapersonal scale and the Interpersonal scale were significantly correlated at .72 initially, at .86 at the 3-week interval, and at .84 at the 5-month interval. Due to these high correlations, Worthington et al. (2003) recommend using the one factor model for the RCI-10, as using both scales would be redundant. This suggestion was followed in the current study.

## **Reliability Analysis**

Reliability analysis allows one to study the properties of measurement scales and the items that compose the scales (Tabachnick & Fidell, 2007). Cronbach's alpha reliability analysis procedure calculates a reliability coefficient that ranges between 0 and 1. The reliability coefficient is based on the average inter-item correlation. Cronbach's alpha ( $\alpha$ ) coefficients greater than 0.70 are assumed to be reasonably reliable (Schultz & Whitney, 2005). Item-total correlations are a measure of the relationship between a single item and scores on the scale overall. Item-total correlations that are negative or near zero indicate an item is not consistent with the other items on a specific scale (Shultz & Whitney, 2005). According to Cohen (1988), a correlation of .30 indicates a moderate correlation and is an acceptable cut-off for inclusion. Table 3 depicts the summary of the reliability analysis for all the scales used in this study. The number of items, sample size, Cronbach's alpha coefficient, and range of item-total correlations are provided. Results from the analysis revealed that all variable constructs were sufficiently reliable. Table 4 provides item-variable specifications for the protocol. Please see Appendix C to view the protocol in its entirety.

## **Main Study Procedure**

After IRB approval was obtained, students at Andrews University were directly invited to participate in a study on body image in two ways: (a) Paper surveys were distributed in students' mailboxes at the dormitories, and (b) An announcement was placed in the Andrews Agenda (on-line newsletter) with a link to a web-based survey. See below for further explanation. In return for their participation, students were

informed that they would be entered into a lottery drawing for one of five \$100 cash prizes to be awarded in March 2011.

Table 3

*Reliability Analysis for All Scales Included in Study*

Scale	N	# of items	Cronbach's alpha	Item-total corr. Range
Appearance evaluation	345	7	0.866	0.571–0.678
Overweight preoccupation	345	4	0.722	0.490–0.589
Self-classified weight	345	2	0.832	0.713–0.713
Body satisfaction (BASS)	345	9	0.816	0.406–0.757
Ethnic identity	345	12	0.880	0.271–0.738
Internalization	345	9	0.877	0.227–0.784
Sociocultural pressure	345	10	0.839	0.325–0.646
Religious commitment	345	10	0.797	0.275–0.723

Table 4

*Item-Variable Specification*

Scale	# of items	Corresponding survey questions
Appearance evaluation	7	1, 3, 5, 6, 7, 8, <sup>a</sup> 9 <sup>a</sup>
Overweight preoccupation	4	2, 4, 10, 11
Self-classified weight	2	12, 13
Body satisfaction	9	14–22
Ethnic identity	12	23–34
Internalization	9	35–43
Sociocultural pressure	10	44–53
Religious commitment	10	54–63

<sup>a</sup> Items are reverse-scored.

## Paper-Based Survey

### **Round 1 Survey: October 1, 2010**

During the first round of the paper-based survey, packets containing a letter inviting students to participate in a 20-minute study on women's body image, an informed consent form, a demographic questionnaire, entry form for the \$100 prize, the pertinent scales from the Multidimensional Body-Self Relations Questionnaire—Appearance Scales, The Sociocultural Attitudes Toward Appearance Questionnaire-3, The Perceived Sociocultural Pressure Scale, The Multigroup Ethnic Identity Measure, and The Religious Commitment Scale-10, and an addressed stamped envelope to return the survey were placed in each resident's mailbox by the researcher and/or another graduate student from the Department of Educational and Counseling Psychology.

### **Round 2 Survey: October 15, 2010**

During the second round of the paper-based survey, all students in the women's dorm received a letter thanking students who had already participated in the survey and encouraged those who had yet to complete the survey to participate. Just as in the first round, students also received a packet containing an informed consent form, a demographic questionnaire, entry form for the \$100 prize, the pertinent scales from the Multidimensional Body-Self Relations Questionnaire—Appearance Scales, The Sociocultural Attitudes Toward Appearance Questionnaire-3, The Perceived Sociocultural Pressure Scale, The Multigroup Ethnic Identity Measure, and The Religious Commitment Scale-10, and an addressed stamped envelope to return the survey. These packets were placed in each resident's mailbox by the researcher and/or another graduate student from the Department of Educational and Counseling Psychology Department.

### **Round 3 Survey: November 1, 2010**

During the final round of the paper-based survey, all students in the women's dorm received a letter thanking those students who had already participated in the survey and encouraging those who had yet to complete the survey to participate. Just as in the first and second round, students received a packet containing an informed consent form, a demographic questionnaire, entry form for the \$100 prize, the pertinent scales from the Multidimensional Body-Self Relations Questionnaire—Appearance Scales, The Sociocultural Attitudes Toward Appearance Questionnaire-3, The Perceived Sociocultural Pressure Scale, The Multigroup Ethnic Identity Measure, and The Religious Commitment Scale-10, and an addressed stamped envelope to return the survey. These packets were placed in each resident's mailbox by the researcher and/or another graduate student from the Department of Educational and Counseling Psychology Department.

### **Web-Based Survey: October 1, 2010, to February 1, 2011**

The web-based questionnaire was developed and designed using Survey Monkey as the platform. Survey Monkey is a web-based, flexible, scalable, secure survey development tool. The web-based survey contained the following: Informed Consent Form, Demographic Questionnaire, The Multidimensional Body-Self Relations Questionnaire—Appearance Scales, The Sociocultural Attitudes Toward Appearance Questionnaire-3, The Perceived Sociocultural Pressure Scale, The Multigroup Ethnic Identity Measure, and The Religious Commitment Scale-10. An announcement was placed in the Andrews Agenda (an on-line campus newsletter that is emailed to students every Monday and Thursday) for 10 weeks, soliciting students to participate in an on-line survey.

In order to ensure that anonymity was preserved, I immediately separated the completed packets that were received via postal mail into three boxes: surveys, consent forms, and entry forms. The consent forms and entry forms were secured in a file cabinet in my home. For the internet-based survey, participants were directed to another screen to complete the entry form. These data were compiled on a separate spreadsheet. On March 1, 2011, five names were randomly selected (2 mail and 3 internet) to receive a \$100 cash prize.

To ensure that there were no duplicate responses (one person completing the survey more than once) a question was posed on the demographic questionnaire which stated: "This is the only version of this survey that I have completed." Responses were Yes or No.

### **Data Analysis**

The data were analyzed employing SPSS for Windows Version 19.0 (Statistical Package for the Social Sciences, Chicago, Illinois). The following statistical analyses were conducted in order to answer the research questions. For research question 1, a Multivariate Analysis of Variance (MANOVA) was used in order to ascertain if there were significant differences in body image among ethnic groups. A MANOVA was employed as there are multiple dependent variables in this study. For research question 2, an Independent *t* Test, and Analysis of Variance (ANOVA), as well as Post-Hoc procedures were used to ascertain if there were significant differences in ethnic identity among ethnic groups. For research question 3, an Analysis of Variance (ANOVA) was employed in order to ascertain if a relationship existed between Ethnic Identity and Generational Distance from Forefather's Land of Origin. For both research questions 2

and 3, an ANOVA was used due to one dependent variable being tested. For research question 4, a Canonical Correlation was employed in order to ascertain if a relationship existed between the Body Image variables (Appearance Evaluation, Body Areas Satisfaction, Self-Classified Weight, and Overweight Preoccupation) and Ethnic Identity, Internalization-General, Internalization-Athletic, Sociocultural Pressure, and Religious Commitment. A Canonical Correlation was used as I wanted to analyze the relationship between two sets of variables. See Chapter 4 for further explanation of statistical tests used, assumptions met, analysis of data, and results.

### **Summary**

This chapter described the methods used during this study. A pilot study was conducted in September 2009 to ascertain the proper assessment tools to be used in the final study. Over a 3-day period, 140 undergraduate females were assessed on body image concerns, internalization of the thinness ideal, sociocultural pressure, and ethnic identity using the following measures: The Multidimensional Body-Self Relations Questionnaire—Appearance Scales (MBSRQ-AP), The Sociocultural Attitudes Toward Appearance Questionnaire-3 (SATAQ-3), Perceived Sociocultural Pressure Scale (PSP), and The Multigroup Ethnic Identity Measure (MEIM). After analyzing the data, the following subscales were removed due to redundancy: Appearance Orientation (MSBRQ-AS), Internalization-Athletic (SATAQ-3), and Affirmation, Belonging and Commitment (MEIM).

The main study was conducted from October 1, 2010, through February 1, 2011, and assessed a diverse sample of 345 undergraduate females on body image concerns, internalization of the thinness ideal, socio-cultural pressure, ethnic identity, and religious

commitment using the following measures: The Multidimensional Body-Self Relations Questionnaire—Appearance Scales (MBSRQ-AP), The Sociocultural Attitudes Toward Appearance Questionnaire-3 (SATAQ-3), Perceived Sociocultural Pressure Scale (PSP), The Multigroup Ethnic Identity Measure (MEIM) and Religious Commitment Inventory-10 (RCI-10). Participants were solicited in two ways: a 45-day mail survey as well as a 4-month web-based survey. After data collection was completed, analysis was conducted using SPSS (Statistical Package for the Social Sciences) version 19.0.



## CHAPTER 4

### ANALYSIS OF DATA

The purpose of this study was to examine the relationship between body image and ethnic identity in undergraduate females. Additionally, possible correlates of body image dissatisfaction including internalization of the thinness idea, sociocultural pressure, and religious commitment were explored. This chapter presents the analysis of data for this dissertation. This chapter is organized as follows. First the demographic characteristics of the participants are presented. Secondly, the results of the analysis for each research question are reported.

#### **Demographic Characteristics**

The final sample included 345 female undergraduates from five ethnic groups. Table 5 displays the demographic information of this sample. Specifically, the sample included: 150 (43.5%) Caucasian, 60 (17.4%) African American, 32 (9.3%) West Indian/Caribbean, 51 (14.8%) Hispanic/Latina, 43 (12.5%) Asian/Asian American, and 9 (2.6%) reported being multi-ethnic.

In terms of college level classification, the sample includes 79 (22.9%) Freshman, 68 (19.7%) Sophomore, 106 (30.7%) Junior, and 92 (26.7%) Senior. The age of the participants in this sample range from 17 to 64 years old, with a mean age of 20.77 ( $SD=4.61$ ). In this sample, the majority of participants were single (72.2%), about one-

Table 5

*Demographic Characteristics of Participants*

Characteristic	<i>N</i>	%
Ethnicity		
Caucasian American	150	43.5
African American	60	17.4
West Indian/Caribbean	32	9.3
Hispanic American	51	14.8
Asian American	43	12.5
Multiple Ethnicities	9	2.6
College level classification		
Freshman	79	22.9
Sophomore	68	19.7
Junior	106	30.7
Senior	92	26.7
Marital Status		
Single	249	72.2
Committed Relationship	86	24.9
Married	7	2.0
Divorced	3	0.9
Generational Status		
Foreign exchange	20	5.8
Immigrated to U.S.	49	14.2
First-generation American	89	25.8
Second-generation American	36	10.4
Third-generation American	33	9.6
Fourth-generation or greater	118	34.3
Religion		
Seventh-day Adventist	334	96.8
Other	11	3.2

*Note.* *N* = 345.

fourth were in a committed relationship (24.9%) and a small percentage were either married (2%) or divorced (0.9%).

The participants in this sample were also asked a question pertaining to the length of time or number of generations their family had resided in the United States. As can be seen from Table 5, about one-third of the participants had families that had resided in the United States for four or more generations. Specifically, the sample consisted of 20 (5.8%) Foreign exchange students, 49 (14.2%) individuals who immigrated to the United States, 89 (25.8%) first-generation Americans, 36 (10.4%) second-generation Americans, 33 (9.6%) third-generation Americans, and 118 (34.2%) being fourth-generation or more. This sample consisted largely of Seventh-day Adventists (334, 96.8%). Eleven participants (3.2%) cited other religious affiliations including Lutheran, Catholic, and Pagan.

### **Preliminary Analysis**

Prior to analyzing the four research questions, data screening was undertaken to ensure the variables of interest met appropriate statistical assumptions. Thus, the following analyses followed a similar analytic strategy in that the dependent variables were first evaluated for normality, linearity, homoscedasticity, and multicollinearity. Subsequently, frequency statistics and multiple regressions were run to determine if any relationships existed between variables of interest.

#### **Research Question 1**

Research Question 1 (RQ1) asked, To what extent is body image related to ethnicity, where body image is measured by Appearance Evaluation Subscale, Body Satisfaction Subscale, Overweight Preoccupation, and Self-Classified Weight Subscale?

Prior to analyzing Research Question 1, the data were screened for univariate outliers, multivariate outliers and missing data within each group. Individuals who reported their ethnicity as other ( $n = 9$ ) were not included in the analysis due to small sample size. Missing data were evaluated using frequency tables. No cases had missing data. Univariate outliers were evaluated by transforming raw scores to  $z$ -scores, by group and comparing the  $z$ -scores to a critical value of  $\pm 3.20$ ,  $p < .001$  (Tabachnick & Fidell, 2007). Values that exceed this critical value are more than 3 standard deviations above or below the mean and are considered extreme. These cases should be evaluated and removed, if warranted (Tabachnick & Fidell, 2007). No univariate outliers were detected. The data were screened for multivariate outliers using Mahalanobis distance (Tabachnick & Fidell, 2007). With four continuous variables, the critical value for Mahalanobis distance is 18.467. One case had a Mahalanobis distance that exceeded the critical value (Mahal = 24.42). This case was removed from the analysis. After removing the multivariate outlier, the sample sizes were  $n = 149, 60, 32, 51,$  and 43 for Caucasian, African American, West Indian/Caribbean, Hispanic/Latina, and Asian American, respectively. Descriptive statistics for the four dependent variables are presented in Table 6.

Prior to testing Research Question 1, the assumptions of normality, linearity, homogeneity of variance-covariance matrices, and multicollinearity were evaluated. MANOVA is robust to violations of normality as long as the sample size in each cell is larger than 20 (Tabachnick & Fidell, 2007); however, univariate normality was still evaluated using histograms and skewness statistics. The Body Satisfaction Scale was negatively skewed for the West Indian/Caribbean group (skew = -1.55); however,

MANOVA results using the transformed and untransformed variables were similar so the non-transformed output was reported to aid interpretation of results (Tabachnick & Fidell, 2007).

Table 6

*Means, Standard Deviations, and Skewness for Sample*

Variable	<i>n</i>	<i>m</i>	<i>SD</i>	Skewness
Appearance evaluation scale	336	3.49	0.75	-0.60
Overweight preoccupation scale	336	2.52	0.87	0.31
Self-classified weight scale	336	3.27	0.66	0.41
Body satisfaction scale	336	3.49	0.69	-0.21

Linearity was evaluated visually using bivariate scatterplots for each pair of dependent variables. Curvilinearity was not evident, thus the assumption was met (Tabachnick & Fidell, 2007). Homogeneity of variance-covariance matrices was evaluated using Box's M test. The test was significant (Box's M = 104.258,  $F(40, 76829.845) = 2.515, p < .0001$ , thus the assumption was not met (Tabachnick & Fidell, 2007). The group with the largest sample size (Caucasian Americans) had smaller variances and covariances compared to the other groups, indicating that the significance tests may be too liberal (Tabachnick & Fidell, 2007). Since the assumption was violated, (Box M must be .05 to meet assumption of equality), the Pillai's criterion was used to evaluate the multivariate main effect of ethnicity because this test is more robust to violations of homogeneity of variance. Due to the unequal sample size of each ethnic group, there is greater potential to distort alpha levels. This will affect whether the null hypothesis is retained or rejected. Multicollinearity was evaluated using bivariate

correlations. If the dependent variables are correlated above  $r = .90$ , multicollinearity may be an issue (Tabachnick & Fidell, 2007), meaning that the variables are highly correlated and are redundant. Redundant variables are not needed as they inflate the size of error which weakens the statistical analysis. None of the variables were correlated above  $r = .90$  (see Table 7).

Table 7

*Correlation Coefficients for Body Image Variables*

Variable	1	2	3	4
1. Appearance evaluation	—	-.453	-.488	.772
2. Overweight preoccupation		—	.364	-.471
3. Self-classified weight			—	-.411
4. Body satisfaction				—

*Note.*  $N = 339$ .

Descriptive statistics were run to identify as a whole how undergraduates view body image and ethnic identity. As noted in Table 6, in general the female undergraduates in this study displayed a positive body image. Specifically, on the Appearance Evaluation scale, the mean score was 3.49 ( $SD = 0.75$ ) indicating that the women in this study view their bodies in a positive manner. In terms of Overweight Preoccupation, the female undergraduates' mean score was a 2.52 ( $SD = 0.87$ ) indicating little concern with being overweight. On the Self-Classified Weight scale, the mean score was 3.27 ( $SD = 0.66$ ) indicating that these women viewed themselves as “normal” weight. In terms of Body Areas Satisfaction, the undergraduate females' mean score was

3.49 ( $SD = .69$ ) suggesting that these women are mainly satisfied with all areas of the body.

As noted in Table 8 scores on the Appearance Evaluation Scale range from 3.64 for West Indian/Caribbean to a 3.45 for Hispanic American. Scores above 3 on the Appearance Evaluation scale are associated with greater positive feelings about one's appearance while scores below 3 indicate dissatisfaction with one's overall appearance. These scores indicate that the individuals in this survey on average expressed mostly positive feelings towards their appearance.

Scores on the Overweight Preoccupation scale ranged from 2.38 for West Indian/Caribbean to 2.69 for Hispanic American. The Overweight Preoccupation scale measures excessive concerns about being overweight. Individuals with scores above 3 are more preoccupied with their weight and body fat, whereas those with scores below 3 show little concern about these issues. Scores from this study indicate that these individuals have low preoccupation with weight.

Recall that the Self-Classified Weight scale measures how one perceives and labels one's weight from very underweight to very overweight. Scores on the Self-Classified Weight scale range from 2.99 for Asian Americans to 3.40 for both African Americans and Hispanic Americans which indicates that individuals in this study label themselves as normal weight. A score of 3 on this scale is "normal weight."

The Body Satisfaction scale measures specific aspects of one's physical appearance including skin complexion, facial features, hair texture, and specific areas of the body (e.g., legs, mid-torso, and upper torso). Scores above 3 indicate that the individual is generally content with most areas of their body, while scores below 3 are

Table 8

*Means, Standard Deviations, and Skewness for Dependent Variables by Ethnicity*

Ethnicity	Variable	<i>n</i>	<i>m</i>	<i>SD</i>	Skewness
Caucasian American	Appearance Evaluation Scale	149	3.47	0.71	-0.36
	Overweight Preoccupation Scale	149	2.46	0.79	0.19
	Self-Classified Weight Scale	149	3.30	0.63	0.17
	Body Satisfaction Scale	149	3.54	0.61	-0.02
African American	Appearance Evaluation Scale	60	3.50	0.83	-0.44
	Overweight Preoccupation Scale	60	2.63	1.01	0.63
	Self-Classified Weight Scale	60	3.40	0.69	-0.27
	Body Satisfaction Scale	60	3.45	0.78	-0.21
West Indian/Caribbean	Appearance Evaluation Scale	32	3.64	0.70	-0.52
	Overweight Preoccupation Scale	32	2.38	0.97	0.57
	Self-Classified Weight Scale	32	3.22	0.61	0.79
	Body Satisfaction Scale	32	3.43	0.81	-1.55
Hispanic American	Appearance Evaluation Scale	51	3.45	0.99	-0.95
	Overweight Preoccupation Scale	51	2.69	0.80	-0.04
	Self-Classified Weight Scale	51	3.40	0.73	1.04
	Body Satisfaction Scale	51	3.45	0.72	-0.64
Asian/Asian American	Appearance Evaluation Scale	43	3.50	0.45	-0.04
	Overweight Preoccupation Scale	43	2.59	0.90	-0.09
	Self-Classified Weight Scale	43	2.99	0.54	1.12
	Body Satisfaction Scale	43	3.42	0.49	0.13

indicative of individuals who are generally dissatisfied with many areas of the body.

Scores in this study ranged from 3.42 for Asian Americans to 3.54 for Caucasian Americans indicating that the females were moderately satisfied with all areas of their body.

#### MANOVA Analysis of H1

Using SPSS 17.0, a multivariate analysis of variance was performed to investigate ethnicity and body image. A MANOVA is used to test whether mean differences among groups on a combination of dependent variables are likely to have occurred by chance. Four dependent variables were used in the MANOVA model: appearance evaluation, body satisfaction, overweight preoccupation, and self-classified weight. The independent



variable was ethnicity (Caucasian American, African-American, West-Indian/Caribbean, Hispanic American, and Asian/Asian-American).

There was a significant mean difference on the combined DV's of body image between different ethnicities. Results of the MANOVA indicate the combined DVs were significantly related by ethnicity,  $F(16, 1320) = 2.030, p = .009, Pillai's = .096, \text{partial } \eta^2 = 0.024$ ; see Table 9. Approximately 2% of the variance in the composite dependent variable was explained by ethnicity (partial eta squared = 0.024). Since the multivariate main effect of ethnicity on the composite DV was significant, the individual dependent variables were investigated further with univariate tests. To protect against inflated Type I error, Bonferoni adjustment was performed. A Type I error is an error in rejecting the null hypothesis. The original alpha level of .05 was divided by 4 (the number of dependent variables) resulting in a new alpha level of .0125. The univariate  $F$  tests were evaluated at the lower alpha level. When the individual dependent variables were evaluated separately, only mean ratings of self-classified weight were significantly different depending on ethnicity (see Table 9). Approximately 4% of the variance in self-classified weight ratings was explained by ethnicity ( $F(4, 330) = 3.291, p = 0.012, \text{partial } \eta^2 = 0.038$ ).

Since the univariate main effect of ethnicity was significant for self-classified weight, post-hoc Games-Howell tests were computed to determine which ethnic groups were significantly different from each other. As shown in Table 10, there was a significant mean difference in self-classified weight ratings for Asian Americans. Asian Americans had significantly lower self-classified weight ratings than did Caucasian Americans, African Americans, and Hispanic Americans (mean difference = 0.305,

Table 9

*Univariate Model Summary for Research Question 1*

Source	Dependent Variable	SS	df	MS	F	Sig.	Partial $\eta^2$
Ethnicity	Appearance Evaluation Scale	0.87	4.00	0.219	0.384	0.820	0.005
	Overweight Preoccupation Scale	3.57	4.00	0.892	1.182	0.318	0.014
	Self-Classified Weight Scale	5.43	4.00	1.358	3.291	0.012	0.038
	Body Satisfaction Scale	0.80	4.00	0.200	0.450	0.772	0.005
Error	Appearance Evaluation Scale	188.11	330.00	0.570			
	Overweight Preoccupation Scale	248.95	330.00	0.754			
	Self-Classified Weight Scale	136.12	330.00	0.413			
	Body Satisfaction Scale	146.85	330.00	0.445			
Corrected total	Appearance Evaluation Scale	188.99	334.00				
	Overweight Preoccupation Scale	252.52	334.00				
	Self-Classified Weight Scale	141.56	334.00				
	Body Satisfaction Scale	147.65	334.00				

Note.  $n = 149$  for Caucasians,  $n = 60$  for African Americans,  $n = 32$  for West Indian/Caribbean's,  $n = 51$  for Hispanics/Latinas and,  $n = 43$  for Asian Americans.

Table 10

*Ethnic Differences for Self-Classified Weight*

Ethnic group	<i>n</i>	<i>m</i>	<i>SD</i>	Ethnic Group			
				2	3	4	5
1. Caucasian American	149	3.30	0.63	-.1067	.0746	-.1086	.3050*
2. African-American	60	3.40	0.69	—	.1813	-.0020	.4116*
3. West Indian/Caribbean	32	3.22	0.61	—	—	-.1832	.2304
4. Hispanic American	51	3.40	0.73	—	—	—	.4136*
5. Asian/Asian American	43	2.99	0.54	—	—	—	—

*Note.* Games-Howell Test used for pairwise comparisons.

\**p* < .05.

0.412, and 0.414, respectively). No other ethnicities were significantly different in their self-classified weight ratings.

### Research Question 2

Research Question 2 (RQ2) asked, To what extent is ethnic identity related to ethnicity? RQ2 was analyzed using an analysis of variance (ANOVA). ANOVA was employed to determine if there were differences in ethnic identity of Caucasian Americans compared to African Americans, Asian Americans, Hispanic Americans, West Indian/Caribbeans, and others. The criterion variable, ethnic identity, was measured by 12 questions on a 4-point Likert-type scale where 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Agree*, and 4 = *Strongly Agree*. Descriptive statistics for four groups are given in Table 11.

Prior to analysis the data were screened for missing data and univariate outliers and none were found. The assumptions of normality and homogeneity of variance were also evaluated. Normality was evaluated using the procedure described for Research

Question 1 above. The assumption of normality was met. The assumption of homogeneity of variance was evaluated using Levene's test. Levene's test is used to test for equal variances across groups or samples. Levene's test was significant ( $F(4, 331) = 5.402, p < .001$ ), indicating that the assumption was not met, indicating unequal variances. Since the assumption was not met, the Welch test was used to evaluate the significance of the main effect of ethnicity because this test is more robust to violations of homogeneity of variance (Keppel & Wickens, 2004). This tests for the equality of means without the homogeneous variance assumption. Descriptive statistics for ethnic identity, by ethnicity and entire sample, are provided in Table 11.

Table 11 presents the mean, standard deviation, and skewness for this sample as a whole and by ethnic group. Recall from Chapter 3 that ethnic identity scores range from a 1 (low ethnic identity/lack of exploration and commitment) to a 4 (high ethnic identity/ethnic identity achievement). As a whole, the participants in this study show a lack of exploration and commitment towards their ethnic group (Mean=2.67,  $SD=0.62$ ). In terms of specific ethnic groups, Asians/Asian Americans displayed the most ethnic identity with a mean score of 2.94 ( $SD=0.58$ ), followed by African Americans (Mean=2.79,  $SD=0.68$ ), Hispanic Americans (Mean=2.75,  $SD=0.78$ ), Caucasian Americans (Mean=2.56,  $SD=0.51$ ), and West Indians/Caribbeans (Mean=2.52,  $SD=0.59$ ).

The main effect of ethnicity was significant (Welch (4, 105.300) = 5.003,  $p = .001$ , partial eta squared = .054). Approximately 5% of the variance in ethnic identity scores was explained by ethnicity. Since the main effect was significant, post-hoc Games-Howell tests were conducted to determine which ethnic groups differed from which other ethnic groups. Asian Americans had significantly higher ethnic identity ratings than did

Caucasian Americans and West Indians/Caribbeans (mean difference = 0.382 and 0.423 respectively). No other ethnic groups differed significantly from each other regarding ethnic identity ratings (see Table 12).

Table 11

*Means, Standard Deviations, and Skewness for Ethnic Identity, by Ethnicity*

Ethnicity	<i>N</i>	<i>m</i>	<i>SD</i>	Skewness
Caucasian American	150	2.56	0.51	-0.05
African American	60	2.79	0.68	-0.58
West Indian/Caribbean	32	2.52	0.59	-0.73
Hispanic American	51	2.75	0.78	-0.29
Asian/Asian American	43	2.94	0.58	0.40
Undergraduate females	336	2.67	0.62	-0.38

Table 12

*Ethnic Differences for Ethnic Identity*

Ethnic group	<i>n</i>	<i>m</i>	<i>SD</i>	Ethnic Group			
				2	3	4	5
1. Caucasian American	150	2.56	0.51	-.2267	.0414	-.1910	-.3816*
2. African-American	60	2.79	0.68	—	.2681	.0356	-.1549
3. West Indian/Caribbean	32	2.52	0.59	—	—	-.2324	-.4230*
4. Hispanic American	51	2.75	0.78	—	—	—	-.1905
5. Asian/Asian American	43	2.94	0.58	—	—	—	—

*Note.* Games-Howell Test used for pairwise comparisons.

\**p* < .05.

### Research Question 3

Research Question 3 (RQ3) asked, To what extent is ethnic identity related to generational distance from land of origin? RQ3 was analyzed using an analysis of

variance (ANOVA). The dependent variable was ethnic identity. The independent variable was generational distance from land of origin. Prior to analysis the data were screened for univariate and multivariate outliers and none were detected. The assumptions of normality and homogeneity of variance were also tested using the same process described in Research Question 2. The assumption of normality was met. The assumption of homogeneity of variance was not met ( $F(5, 330) = 2.743, p = 0.019$ ), thus the Welch test was evaluated instead of the omnibus  $F$  test. Descriptive statistics for ethnic identity by ethnicity are provided in Table 13. Recall that the Ethnic Identity Scale is a continuous variable that ranges from a lack of exploration and commitment (low interest and awareness and little clarity concerning one's ethnicity) to evidence of both exploration and commitment that is reflected in efforts to learn more about one's background and a clear understanding of the role of ethnicity for oneself. High scores are indicative of ethnic identity achievement, whereas low scores indicate ethnic identity diffusion. As shown in Table 13, ethnic identity scores range from 2.50 to 2.83 indicating that these individuals have low interest and little awareness of their own ethnicity.

Table 13

*Mean, Standard Deviation, and Skewness for Ethnic Identity, by Ethnicity*

Generation	<i>n</i>	<i>m</i>	<i>SD</i>	Skewness
Foreign exchange student	19	2.72	0.58	-1.02
Immigrated to the United States	49	2.83	0.66	0.33
First Generation American	88	2.75	0.75	-0.49
Second Generation American	34	2.64	0.57	-0.56
Third Generation American	33	2.51	0.50	-0.08
Fourth generation or greater	113	2.61	0.52	0.07

The main effect of generation was not significant ( $Welch(5, 93.767) = 1.751, p = 0.131$ ). There was not a significant mean difference in ethnic identity ratings depending on generational status. Since the main effect was not significant, post-hoc tests were not conducted.

#### Research Question 4

Research Question 4 (RQ4) asked, How is body image (as measured by appearance evaluation subscale, body satisfaction subscale, overweight preoccupation subscale, and self-classified weight subscale) related to ethnic identity (as measured by the ethnic identity scale), internalization of the thinness ideal (as measured by the internalization- general subscale and internalization-athletic subscale), sociocultural pressure (as measured by the sociocultural pressures scale) and religious commitment (as measured by the religious commitment inventory)?

Research Question 4 was analyzed using canonical correlation. The dependent variables were appearance evaluation, body satisfaction, overweight preoccupation, and self-classified weight. The independent variables were ethnic identity, internalization of thinness, sociocultural pressure, and religious commitment. Prior to analysis the data were screened for missing data and outliers. No missing data were detected; however, eight univariate outliers were identified and removed. Once the outliers were removed the sample size used for the canonical correlation was  $n = 337$ . The assumptions of normality, linearity, homoscedasticity, and multicollinearity were evaluated and the assumptions were met. Descriptive statistics and correlations are provided in Table 14. Table 14 provides descriptive statistics as well as inter-correlations among the variables tested in the subsequent canonical correlation. Overall, participants in this study

Table 14

*Means, Standard Deviations, and Correlations*

Variable	<i>N</i>	<i>m</i>	<i>SD</i>	2	3	4	5	6	7	8
1. Appearance evaluation	337	3.51	0.73	-.450*	-.467*	.767*	.083	-.408*	-.326*	.062
2. Overweight preoccupation	337	2.50	0.87	—	.372*	-.440*	-.024	.493*	.526*	-.019
3. Self-classified weight	337	3.26	0.65	—	—	-.398*	-.050	.432*	.094*	-.052
4. Body satisfaction	337	3.50	0.65	—	—	—	.119*	-.417*	-.351*	.094
5. Ethnic identity	337	2.66	0.60	—	—	—	—	.062	-.060	.103
6. Sociocultural pressure	337	2.15	0.79	—	—	—	—	—	.391*	-.023
7. Internalization of thinness	337	6.82	7.88	—	—	—	—	—	—	-.096
8. Religious commitment	337	3.91	0.87	—	—	—	—	—	—	—

\* $p < .05$ .



displayed positive body image as indicated by the scores obtained on the Appearance Evaluation Scale, Overweight Preoccupation Scale, Self-Classified Weight Scale, and Body Areas Satisfaction Scale. Recall from Chapter 3 that the Appearance Evaluation scale assesses feelings of attractiveness or unattractiveness; satisfaction or dissatisfaction with one's looks. Participants' mean score on the Appearance Evaluation scale was 3.51 ( $SD=0.73$ ) indicating positive feelings towards their appearance. In terms of Overweight Preoccupation (a scale that measures dieting, weight vigilance, and eating restraint), the undergraduate females' mean score was 2.50 ( $SD=0.87$ ) indicating that these women showed little concern about their weight. Women in this study also rated themselves as "normal" weight as indicated by the Self-Classified Weight scale. The mean score for this scale which reflects how an individual perceives and labels her weight from very underweight to very overweight was 3.26 ( $SD=0.65$ ). According to this scale an individual that classifies herself as "normal" weight would score a 3. The last body image variable that was used in the canonical correlation is Body Areas Satisfaction. This scale examines how happy or unhappy an individual is with various parts of the body (facial features, torso, legs, etc.). The mean score on the BASS was 3.50 ( $SD=0.65$ ) indicating that the females were happy or satisfied with most areas of the body.

Descriptive statistics for the following predictor variables: Ethnic Identity, Sociocultural Pressure, Internalization of the Thinness Ideal, and Religious Commitment are also presented in Table 14. Recall from Chapter 3 that ethnic identity assesses exploration and commitment to one's ethnic group. Participants in this study display low ethnic identity or a lack of commitment and exploration as indicated by a mean score of 2.66 ( $SD=0.60$ ). A mean score of 2.66 indicates that these individuals spend little time

exploring and/or educating themselves about their ethnic heritage and traditions. A second predictor variable that will be tested in the canonical correlations is Religious Commitment. This variable assesses the level at which a person holds to her religious values, beliefs, and practices and uses them in daily life. Participants' mean score on Religious Commitment was 3.91 ( $SD=0.87$ ) indicating a moderate adherence to their specific religious beliefs. The third predictor variable for body image is Sociocultural Pressure which assesses perceived pressure by family, friends, romantic partners, and the media to conform to the thinness ideal. The mean score for this variable was 2.15 ( $SD=0.79$ ) which indicates that these females experience little pressure from family, peers and romantic partners to conform to the thinness ideal. The last predictor variable is Internalization of the Thinness Ideal which assesses endorsement and acceptance of media messages that promote unrealistic ideals for female beauty and striving to meet these ideals. Females' mean score on this scale was 6.82 ( $SD=7.88$ ) which suggests little internalization of the thinness ideal.

Inter-correlations among dependent variables and predictor variables were examined prior to running the canonical correlation. It was determined that the dependent variables (Appearance Evaluation, Overweight Preoccupation, Self-Classified Weight, and Body Areas Satisfaction) were significantly correlated with each other as well as with the following predictor variables: Sociocultural Pressure and Internalization of the Thinness Ideal. Additionally, the Body Areas Satisfaction Scale was also significantly correlated with the Ethnic Identity Scale. No other significant inter-correlations were noted.

Canonical correlation was performed using SPSS 19.0 MANOVA to determine if there was a relationship between two sets of variables. The first set included appearance evaluation, body satisfaction, overweight preoccupation, and self-classified weight. The second set includes ethnic identity, internalization of thinness, sociocultural pressure, and religious commitment.

The overall model was significant with all four canonical correlations included, Wilks's Lambda = 0.49360,  $F(16, 1005.75) = 16.34$ ,  $p < .001$ . With the first and second canonical correlations removed, the  $F$  values were not significant. The first canonical correlation was .66 (43% overlapping variance); the second was .36 (13% overlapping variance). The first two pairs of canonical variates therefore accounted for the significant relationships between the two sets of variables. Data on the first two pairs of canonical variates appear in Table 15.

With a cutoff correlation of .3, the variables in the set that were correlated with the first canonical variate were internalization of thinness and sociocultural pressure for the predictor variables and appearance evaluation, body satisfaction, overweight preoccupation, and self-classified weight for the body image variables. The first pair of canonical variates indicates that those with low internalization of thinness scores (-.81) and sociocultural pressure scores (-.85) are associated with a high appearance evaluation (.69), high body satisfaction (.73), low overweight preoccupation (-.93), and low self-classified weight (-.51). In other words, individuals who do not subscribe to the cultural thinness ideal, and who do not feel social pressure to be thin have higher body satisfaction, evaluate their appearance more favorably, are less pre-occupied with their weight, and are less likely to rate themselves as being overweight.

Table 15

*Canonical Correlations*

	First canonical variate		Second canonical variate	
	Correlation	Standardized coefficient	Correlation	Standardized coefficient
Predictor				
Ethnic identity	.09	.11	.12	.21
Sociocultural pressure	-.85	-.64	-.47	-.85
Internalization of thinness	-.81	-.55	.58	.94
Religious commitment	.08	.001	.13	.18
Dependent variable				
Appearance evaluation	.69	.09	.19	-.14
Overweight preoccupation	-.93	-.73	.19	.58
Self-classified weight	-.51	-.08	-.83	-1.07
Body satisfaction	.73	.30	.18	.12

The second canonical variate in the set was composed of internalization of thinness and sociocultural pressure for the ethnic identity variables and self-classified weight for the body image variables. The variates suggest that high internalization of thinness (.58) and low sociocultural pressure (-.47) are associated with low self-classified weight (-.84). In other words, individuals who subscribe to the cultural thinness ideal but do not feel social pressure to be thin are more likely to rate themselves as being underweight. Overall, the cultural variables that impacted body image beliefs were internalization and social pressure. Low ratings on these variables were related to more positive body image perceptions.

### **Summary**

The current study examined the relationship between body image and ethnic identity among undergraduate females at a Seventh-day Adventist university. Additionally, the relationship between internalization of the thinness ideal, sociocultural pressure, religious commitment, and body image was examined. Over a 4-month period female undergraduate students were solicited through standard mail and a posting in an on-line newsletter to participate in a survey about body image. Three hundred and forty-five completed surveys were returned. The final sample was composed of females who identified themselves as Caucasian American, African American, West Indian/Caribbean, Hispanic American, Asian American, and being from more than one ethnicity.

As a whole, the undergraduate females in this survey presented with a positive body image. Specifically, the women expressed positive feelings about their bodies, had a low preoccupation with their weight, classified their body weight as “normal,” and were moderately satisfied with all areas of their body. When the body image variables were

evaluated separately, only mean ratings for Self-Classified Weight was significantly different based on ethnicity. Specifically, Asian Americans had significantly lower self-classified weight ratings compared to Caucasian Americans, African Americans, and Hispanic Americans. Ethnic differences did not emerge on any of the other body image variables.

In terms of ethnic identity, as a whole the undergraduate females showed a lack of exploration and commitment regarding their specific ethnic group. When ethnic identity was examined by ethnic group, significant differences emerged with regard to Asian Americans. Specifically, Asian Americans displayed higher ethnic identity ratings compared to Caucasian Americans and West Indians/Caribbeans. No other ethnic groups differed significantly from each other in terms of ethnic identity ratings. Additionally, ethnic identity ratings did not significantly differ based on generational distance from land of origin.

Overall, the cultural variables that impacted body image beliefs were sociocultural pressure and internalization of the thinness ideal. Low ratings on these variables were related to more positive body image perceptions. Specifically, individuals who do not subscribe to the cultural thinness ideal and do not feel social pressure to be thin have higher body satisfaction, evaluate their appearance more favorably, are less preoccupied with their weight, and are less likely to view themselves as being overweight. Additionally, individuals who subscribe to the cultural thinness ideal but do not feel social pressure to be thin are more likely to rate themselves as being underweight.

In sum, the undergraduates in this study presented with a positive body image. Specifically, these women expressed positive feelings about their bodies, had a low preoccupation with their weight, classified their body weight as “normal,” and were satisfied with all areas of their body. In terms of ethnic identity, the females in this study had low interest and little awareness of their own ethnicity. Further discussion of the results as well as implications for practice is presented in Chapter 5.

## CHAPTER 5

### DISCUSSION

Body image has received a lot of attention in both the psychological literature and popular culture. However, this attention has centered on how the “thinness ideal” has impacted Caucasian American and African American women’s body image. Few studies have examined the relationship between body image and ethnic identity among Asian, Latina, and West Indian/Caribbean women or identified variations in body image between these ethnic groups.

The limited research that does exist on these understudied populations has produced inconsistent findings. Some studies suggest that Caucasian females in Western society experience more body dissatisfaction than do African American, Asian American, and Hispanic American females (Cash & Henry, 1995; S. Harris, 1994; Henriques et al., 1996; Nishina, Ammon, Bellmore, & Graham, 2006; Story, French, Resnick, & Blum, 1995). By contrast, other studies either found no variation in body image satisfaction among different ethnic groups (Arriaza & Mann, 2001; Barnett, Keel, & Conoscenti, 2001; Hrabosky & Grilo, 2007; Sharps, Price-Sharps, & Hanson, 2001) or conflicting results without offering an explanation for the discrepancies (Patel & Gray, 2001; Rucker & Cash, 1992; Turnage, 2004).

Given the limited research in this area, and with the population of the United States becoming more diverse, a major objective of this inquiry was to develop a better



understanding of how body image and ethnic diversity affect women of several different ethnic groups, in addition to exploring the relationship between ethnicity and ethnic identity. In contrast to previous research, the sample used in this study included African Americans, Caucasian Americans, Asian Americans, and West Indian/Caribbean Americans.

The second objective of the study was to examine possible correlates of body image dissatisfaction including internalization of the thinness ideal, sociocultural pressure, and religious commitment. Plenty of studies (Gerner & Wilson, 2005; Groesz et al., 2002; Hargreaves & Tiggmann, 2003) have shown that the thinness ideal is popular among the beauty conscious in a large number of countries, suggesting this ideal is not merely a regional concept but an international one as well. Sociocultural pressure and religious commitment also appear to contribute to body image dissatisfaction. However, there continues to be a dearth of studies that explore if and/or how these factors work together to contribute to or protect an individual from body image dissatisfaction. This study aimed to contribute to this need and examine correlations between sociocultural pressure, internalization of the thinness ideal, and religious commitment.

### **Purpose of Study**

The purpose of this study was to examine perceived body image and ethnic identity and their relationships to ethnicity, generational distances, internalization of thinness ideal, sociocultural pressure, and religious commitment among undergraduate female students at Andrews University, a small parochial institution in Southwestern Michigan.

## **Research Questions**

The research questions that framed this study included:

1. To what extent is body image related to ethnicity, where body image is measured by Appearance Evaluation subscale, Body Satisfaction subscale, Overweight Preoccupation, and Self-Classified Weight subscale?
2. To what extent is ethnic identity related to ethnicity?
3. To what extent is ethnic identity related to generational distance from original land of origin?
4. To what extent is body image (as measured by Appearance Evaluation subscale, Body Satisfaction subscale, Overweight Preoccupation subscale, and Self-Classified Weight subscale) related to ethnic identity (as measured by the Ethnic Identity Scale), internalization of the thinness ideal (as measured by the Internalization-General subscale), sociocultural pressure (as measured by the Sociocultural Pressures Scale), and religious commitment (as measured by the Religious Commitment Inventory-10)?

## **Methods**

In order to answer these research questions, undergraduate females from Andrews University were asked to participate in a survey that assessed body image, ethnic identity, internalization of the thinness ideal, sociocultural pressure, and religious commitment. From September 2010 through February 2011, students were asked to participate in the survey in one of two ways: (a) through paper surveys distributed in students' dormitory mailboxes, and (b) through a web-based survey (where participation was solicited via an announcement in the Andrews Agenda, the means to make announcements seen by the entire campus).

Surveys used in this study were the following: Demographic Questionnaire, Multidimensional Body-Self Relations Questionnaire—Appearance Scales (self-report inventory that measures evaluative, cognitive, and behavioral dispositions toward the physical self), The Sociocultural Attitudes Toward Appearance Questionnaire-3 (self-report inventory that measures internalization of the thinness ideal), The Perceived Sociocultural Pressure Scale (self-report measure that assesses perceived pressure by family, friends, romantic partners, and the media to conform to the thinness ideal), Multigroup Ethnic Identity Measure (self-report inventory that assesses the extent to which participants identify and take pride in their racial or ethnic group), and Religious Commitment Inventory-10 (self-report measure that assesses individuals' religious commitment).

The final sample consisted of 345 undergraduate females from five ethnic groups who mostly identified as Seventh-day Adventists (96.8%). The sample consisted of 43.4% Caucasian, 17.4% African American, 9.3% West Indian/Caribbean, 14.8% Hispanic/Latina, 12.5% Asian/Asian American; and 2.6% of respondents reported being multi-ethnic. Chapter 4 provides a full account of the data and results of the survey. The following section provides an overview of the findings.

### **Summary of Findings**

Hypothesis 1 stated that Caucasian females will have greater body dissatisfaction, be more dissatisfied with areas of the body, be more preoccupied with their weight, and be more likely to classify themselves as overweight compared to African American, West Indian/Caribbean, Hispanic American, and Asian American women.

Looking first at the descriptive statistics, participants in the study generally had positive body image. Specifically, scores on the Appearance Evaluation scale ranged from 3.45 to 3.64, which means respondents expressed mostly positive feelings about their appearance. Scores ranged from 2.38 to 2.69 on the Overweight Preoccupation scale, indicating that participants had little preoccupation with weight. They also classified themselves as being of “normal” weight (i.e., scores on the Self-Classified Weight scale ranged from 2.99 to 3.40). Lastly, their scores on the Body Areas Satisfaction scale ranged from 3.42 to 3.54 indicating a moderate satisfaction with their body as a whole.

MANOVA was used to examine the relationship between ethnicity and body image as measured by the Appearance Evaluation scale, Body Areas Satisfaction scale, Overweight Preoccupation scale, and Self-Classified Weight scale. Overall, the females in this study presented with a positive body image. Results indicated that the participants expressed positive feelings about their bodies, had a low preoccupation with their weight, classified their body weight as “normal,” and were moderately satisfied with all areas of their bodies. When the dependent variables were evaluated separately, the only significant difference emerged on the Self-Classified Weight scale (i.e., how an individual perceives and labels her weight), with the Asian American women recording 2.99 compared to African Americans, Caucasian Americans, and Hispanic Americans, who recorded 3.40. Substantively, this 0.41 ( $3.40 - 2.99 = 0.41$ ) difference suggests Asian Americans had statistically significant lower self-classified weight ratings compared to Caucasian Americans, African Americans, and Hispanic Americans. No other ethnic groups were significantly different in this respect.

Hypothesis 2 stated that Caucasian American females will display less ethnic identity when compared to African American, West Indian/Caribbean, Hispanic American, and Asian American females.

An independent samples *t*-test using the ethnic identity subscale was conducted to assess this hypothesis, and the results showed that Caucasian Americans were significantly different from other ethnic groups ( $p = 0.001$ ). A one-way ANOVA was subsequently employed to identify where those differences lie. The analysis revealed that Asian Americans had significantly higher ethnic identity ratings than did Caucasian Americans and West Indian/Caribbean women (mean difference = 0.382 and 0.423 respectively). Hence, there was indeed some support for Hypothesis 2: Caucasian American participants displayed less ethnic identity than did Asian Americans. No other significant results were found.

Research Question 3 explored the degree to which ethnic identity was related to generational distance from land of origin. For example, many children of Asian descent have lived in the United States since birth and never have seen their parents' country of origin. These children were born and brought up in American culture even though their family's cultural heritage originated from Asia. It was hypothesized that the greater the generational distance experienced from one's ethnic land of origin, the greater the loss would be to one's ethnic identity. It was expected that this would be so regardless of ethnicity (Hypothesis 3). ANOVA results showed no significant differences between generational distance from land of origin and ethnic identity; however, this suggests immigrant populations in America maintain their ethnic identity irrespective of their

generational distance from their culture of origin. Therefore, there was no support for Hypothesis 3.

A Canonical Correlation examined the inter-relationships between body image, ethnic identity, internalization of the thinness ideal, sociocultural pressure, and religious commitment (Research Question 4), and was performed to determine if there was a relationship between two sets of variables. The first set included appearance evaluation, body satisfaction, overweight preoccupation, and self-classified weight; the second included ethnic identity, internalization of thinness, sociocultural pressure, and religious commitment. The overall inter-relationships model was significant, with all four canonical correlations included (Wilks's Lambda =  $F(16, 1024.08) = 16.81, p < .001$ ). With the first and second canonical correlations removed, the  $F$  values were not significant. The first canonical correlation was .66 (44% overlapping variance); the second was .33 (11% overlapping variance). The first two pairs of canonical variates therefore accounted for the significant relationships between the two sets of variables. Results from the canonical correlation indicated that high internalization of thinness (.83) and sociocultural pressure (.83) were associated with low appearance evaluation (-.70), low body satisfaction (-.74), high overweight preoccupation (.93), and high self-classified weight (.52). The second canonical correlation indicated that high internalization of thinness (.55) and low sociocultural pressure (-.53) were associated with low self-classified weight (-.85).

These results did not support the hypothesis that regardless of ethnicity, individuals who have a strong ethnic identity would display greater body satisfaction, be more satisfied with areas of the body, be less preoccupied with their weight, classify

themselves as normal weight, internalize the thinness ideal to a lesser extent, feel less sociocultural pressure to conform to the thinness ideal, and have a stronger religious commitment compared to individuals who have a weak ethnic identity (Hypothesis 4). In this study, the result of the canonical correlation suggests that ethnic identity and religious commitment did not appear to have a significant impact on body image.

### **Delimitations**

The study was limited to undergraduate females at Andrews University who participated in this study. Andrews University is a private Seventh-day Adventist university located in Berrien Springs, Michigan.

### **Review of Limitations**

A variety of limitations constrained the conclusions drawn from this research as discussed in Chapter 1. The results from this study are generalizable only to undergraduate females at Andrews University who participated in this study. This could indeed be the main limitation in this study. Results are not generalizable to graduate students, to males attending this or other universities, or to females attending other universities since beauty consciousness among students in different universities, undergoing different courses, at different ages, could be different. For example, students studying in a university situated in a rural area may have different perceptions about body image and beauty compared to students studying in a university situated in an urban area. With these limitations noted, the following section discusses the conclusions and implications stemming from this study.

## Discussion

Overall, the study revealed *no* significant differences between African American, Caucasian American, West Indian/Caribbean, Hispanic American, and Asian American females who participated in this study in terms of body image dissatisfaction. In truth, the participants displayed positive feelings about their bodies. They also had low preoccupation with weight, classified themselves to be of “normal” weight, and were moderately satisfied with all areas of their bodies.

These findings challenge those of previous research (Cachelin et al., 2012; Cash, Morrow, et al., 2004; Holmqvist & Frisen, 2010), which supported the premise that there are large differences in body satisfaction among ethnic groups. The only study that lent partial support to the findings of this study is Grabe and Hyde (2006), which found no significant differences in body satisfaction among African Americans, Hispanic Americans, Asian Americans, and Caucasian Americans. The only exception in their study was a small but significant difference in body dissatisfaction among Caucasian Americans and African Americans, with Caucasian Americans reporting higher levels of body dissatisfaction. The results from this study and mine are similar in that they both suggest that body dissatisfaction may not be as prominent among undergraduate females as previously suspected.

Turning to specific conclusions of the present study, results showed that Caucasian and African American women were satisfied with their body. This is consistent with the findings of Cash, Morrow, et al. (2004) who noted a trend in body image satisfaction amongst the females who participated in their study. They found that from 1983 until the mid-1990s, Caucasian women expressed more body dissatisfaction compared to African American women; however, from the mid-1990s until 2001, both



Caucasian American and African American women expressed a more positive overall body image and were less preoccupied with being overweight. It appears that over previous decades, women of these two ethnicities are experiencing less body dissatisfaction.

Although Cash, Morrow, et al. (2004) did not provide a detailed explanation for the decline in body dissatisfaction, several are possible. First, it is reasonable that standards of beauty have changed over time due to less emphasis on physical beauty and more emphasis on the whole person. Roberts et al. (2006) found that ethnic women are gaining more prominence in the media (television, movies), which may be helping to shape beauty standards in America. Rather than possessing a narrow concept of beauty (e.g., White, thin, toned, large breasts), a broader concept of beauty is now becoming acceptable. Thus, it is possible that the individuals in this study are dismissing the Thinness Ideal and are incorporating other concepts of beauty (as seen in African American and Hispanic American cultures) into their belief systems. By accepting a broader concept of beauty and making comparisons to similar others, women may be protected from developing body dissatisfaction. With the increased presence of ethnically diverse individuals in the media (models, television, and movies), a new standard of beauty may be emerging which women are using as a basis for comparison.

Second, social media (i.e., Facebook, Twitter) may be a contributing factor for the decrease in body image dissatisfaction among the participants in the study. When teens and college students peruse these sites, they are more likely to see women of all shapes and sizes rather than slender models. As Correa, Hinsley, and Gil de Zuniga (2010) found, more than half of American's teens and young adults use social networking sites

and individuals of all ages, ethnicities, sizes, and shapes post pictures of themselves on these sites. It is possible that study participants are comparing themselves to individuals who share many similar physical attributes rather than an unattainable standard of beauty, thus decreasing body dissatisfaction.

Third, it is important to note that views concerning beauty, which relate to body image, are subject to influence by culture and/or religion (Henrickson et al., 2010; Odoms-Young, 2008; Weinberger-Litman, 2008; Wood & Petrie, 2010). Arguably, these factors could explain the disparity between the findings of this study and those of past research. For instance, studies have shown that African American and Hispanic American cultures appear to possess a more flexible view of beauty (Allan, Mayo, & Michel, 1993; Casanova, 2004; Molloy & Herzberger, 1998; Parker, Nichter, Vuckovic, Sims, & Ritenbaugh, 1995) which may be influencing their counterparts from other ethnic backgrounds, and in particular, the participants in this study. The world is shrinking due to most cultures having access to the same multimedia. Might this too be influencing a more “global” sense of beauty?

In summary, respondents in this study expressed positive feelings about their bodies, had a low preoccupation with their weight, classified their body weight as “normal,” and were moderately satisfied with all areas of their bodies. Changing standards of beauty, the advent of social media, and the impact of culture and religion on body image were identified as potential explanations for these findings. Further studies that look at these and other factors that might be contributing to such a change would be important.

## Comparing Ethnic Identities

The results of the MEIM suggest study participants display low levels of ethnic identity, the difference between Asian and other participants notwithstanding (see explanation below). This finding is inconsistent with Phinney and Alipuria's (1990) study on the ethnic identity of various ethnic groups, which found that Blacks, Mexican Americans, and Asian Americans displayed greater ethnic identity than did Caucasians.

Although these differences may be attributable to several factors, including methodological differences between Phinney and Alipuria (1990) and the present inquiry and/or the time lapse between them, it is also possible that participants in this study do not define themselves in terms of ethnicity. With little emphasis on cultural heritage in most areas of the United States, they may instead identify themselves more based on characteristics such as religious affiliation, profession, or college affiliation. Individuals may occasionally label themselves in ethnic ways, to be sure, but these labels may be marginal to their self-concept (Alba, 1990). Moreover, it is unlikely that individuals will see this identity as relevant in most social situations (Alba, 1990). This is due mainly to a reduction of connectedness among persons of the same ethnic background. Many neighborhoods are no longer ethnically homogenous, as in the past, but ethnically heterogeneous, which may encourage individuals to identify with those factors that link them to their neighborhood peers rather than with their own ethnic group (Alba, 1990).

If this argument has merit, one possibility is that participants displayed greater identification with the Seventh-day Adventist culture than with ethnic identity. The majority of the respondents, 96.8%, in the study were Seventh-day Adventists. Such being true, it is highly likely that the majority of these individuals grew up in the Adventist Church, attended a parochial school, and associated mainly with individuals of

the same faith. That these individuals chose to enroll in a private Seventh-day Adventist university is further evidence of their dedication to their faith. Although this potential explanation was not examined in the present study, it is possible that participants held being a Seventh-day Adventist in much higher regard than ethnic group affiliation in terms of how they identified themselves. Further research is needed to support this claim.

The higher ethnic identity ratings of Asian American respondents may be attributable to adherence to traditions and values of the Asian culture. Although this potential explanation was not assessed in this study, there is some basis for it in the literature. According to Lau et al. (2006), individuals in the Asian community tend to keep up with traditions and beliefs of their culture even when they immigrate to other countries. Further, Umana-Taylor et al. (2006) found that Asian families tend to familiarize their children with their culture by attending cultural events, maintaining membership in cultural organizations, and teaching the native language. Additional support for this reasoning comes from Sears, Fu, Henry, and Bui (2003) and Xu, Shim, Lotz, and Almeida (2004) who found that parental influence and peer relationships are strong predictors of ethnic identity among Asian Americans. Both studies found that ethnic identity was strongly associated with being raised in the traditions of Asian culture rather than Western society and developing intra-ethnic group friendships. It is possible that the Asian American participants were raised with strong cultural influences, which contributed to a higher ethnic identity rating compared to Caucasian American and West Indian/Caribbean participants. No other significant results were found.

## **The Relationship Between Ethnic Identity and Generational Distance From Land of Origin**

The failure to identify any statistically significant differences among respondents' ethnic identity based on the distance from their land of origin contradicts findings from published literature (Masuda, Matsumoto, & Meredith, 1970; Perez & Padilla, 2000) as well as the pilot study conducted before the present inquiry. A majority of these studies have shown that when the generational distance from original land of origin increases, ethnic identity decreases. However, the present study has revealed that ethnic identity remains a crucial factor among people whose generational distance from original land is low. This is perhaps attributable to the fact that immigrants in contemporary America are keen on maintaining their identities.

There are three main factors that could also explain the lack of significant results in the current study: the measurement instrument used to assess ethnic identity in this study, the geographic location of participants, and their possible identification as simply "Americans." Previous studies that examined the relationship between ethnic identity and generational distance from original land of origin did not use the MEIM, as was used in the current study. The MEIM has been used profusely in research on ethnic identity (Phinney, 1992, 1996; Phinney & Ong, 2007; Ong et al., 2010), but rarely when examining changes among different generations of Americans. MEIM was beneficial to this study because it allowed for the examination of the influence of ethnic identity from diverse samples and permitted the incorporation of other subscales (e.g., religious belief and cultural traits) into the study of body image.

Moreover, MEIM is unique because it asks the same questions to measure ethnic identity between and within ethnic groups. Previous studies (e.g., Devos, 2006) have used

other measures to assess ethnic identity such as The Bicultural Involvement Questionnaire or The Ethnic Identity Questionnaire. These lesser-known assessments may not provide researchers with the same information as gained from using the MEIM because they assess each culture independently, thus minimizing the chances of making adequate, informative comparisons.

The second factor that could explain why this study did not find a relationship between ethnic identity and generational distance from land of origin could be the geographic location of participants in the sample. For example, unlike the present study, Masuda et al.'s (1970) and Perez and Padilla's (2000) studies were conducted in the Western parts of the United States. Masuda et al. (1970) examined the ethnic identity of three generations of Japanese Americans residing in Seattle, Washington, finding that third-generation Japanese Americans displayed less ethnic identity compared to their first- and second-generation counterparts. Similarly, Perez and Padilla (2000) found a decrease in ethnic identity in third-generation Hispanic American adolescents residing in Los Angeles, California. By contrast, the current study targeted and involved individuals attending a private parochial university in the Midwest. It is noteworthy that people in urban areas have better access to technologies (National Broadband Map, 2013) and fashion trends (Zenner, 2010) compared to people in semi-urban or rural areas. Therefore, their concepts of body image could be entirely different from those of the rural population. In short, geographic location may play an important role in shaping beauty consciousness among people (Laus, Miranda, Almeida, Costa, & Ferreira, 2012).

Third, individuals in the study may have identified themselves as just American. For example, a question on the MEIM asks, "I participate in cultural practices of my own

group, such as special food, music or customs.” A respondent who identifies herself as Hispanic American may respond, “disagree” because in terms of Hispanic culture, she does not participate in cultural activities such as attending Cinco de Mayo festivities. However, this respondent may attend traditional American activities such as a baseball game, or watching fireworks on Independence Day. It is possible that for these respondents, though they identify themselves in terms of their ethnic affiliation, the culture they identify with will be more American than culturally driven.

### **The Relationship Between Body Image, Ethnic Identity, Internalization of the Thinness Ideal, Sociocultural Pressure and Religious Commitment**

The results from this study provide new insights in the connection between body image, internalization of the thinness ideal, and sociocultural pressures. Previous research suggested that internalization of the thinness ideal and sociocultural pressure contributes to body dissatisfaction (Gerner & Wilson, 2005; Groesz et al., 2002; Hargreaves & Tiggmann, 2003). However, the current inquiry seems to suggest that individuals who do not internalize the thinness ideal and do not feel pressure from family, friends, and the media to conform to this ideal have higher body satisfaction, evaluate their appearance more favorably, are less pre-occupied with their weight, and are less likely to rate themselves as being overweight. Feeling less pressure from family, friends, and the media to conform to the thinness ideal may serve as a protective factor against body image dissatisfaction.

Previous literature has shown that family, peers, and the media are the strongest reinforcers of the thinness ideal (Gerner & Wilson, 2005; Groesz et al., 2002; Kichler & Crowther, 2001). The development of self-esteem is directly connected with the thinness

ideal internationalization (J. Thompson & Stice, 2001). Moreover, many people consider thinness as a symbol of health. Due to this, family, friends, and social groups consistently encourage the thinness ideal (Ahern, Bennet, Kelly, & Hetherington, 2011). This is understandable since literature shows that attitudes about body image are initially developed within the context of the family (Phares et al., 2004). While families may often reinforce the thinness ideal through negative communication (teasing or critical comments made about weight and shape, as well as encouragement to diet) (Kichler & Crowther, 2001), it lies within their scope of influence to also contribute to young women accepting their bodies through positive communication (affirming comments about their body, shape, weight, and acceptance of how they look). Although not assessed, it is possible that the respondents in this study had more positive interactions with family members in terms of body image or physical appearance. Family members may have praised and provided positive feedback rather than negative comments or criticism, which may have contributed to more body satisfaction among respondents. Additionally, parents in today's society may have greater knowledge that critical messages and suggestions can lead to the development of bulimia and anorexia in young females. Parents may steer clear of such comments to their offspring. This might be an important question to investigate in further studies in this area.

Research has also found that the peer environment provides a subculture that underscores the importance of the thinness ideal through dieting, pressure to be thin, and teasing about weight and shape (Gerner & Wilson, 2005). It is possible that the females in this study did not experience pressure from their friends to conform to the thinness ideal, since the concept of beauty is so much more tolerant today than 20 years ago. Less



pressure from family and friends to conform to the unattainable beauty standards set forth by movies, Hollywood, and society might have prompted them to develop greater body satisfaction compared to those who have felt sociocultural pressure and have internalized the thinness ideal. Again, this might be an important question to ask in further studies in this area.

Previous literature (Joughin et al., 1992; K. Kim, 2007; Odoms-Young, 2008) has also pointed to religiosity as a protective factor against body dissatisfaction. The current study failed to find a significant relationship between body image and religious commitment. A number of factors may play a role in this discrepancy such as the measure used to assess religious commitment, an over-representation of highly religious individuals in the sample, and the lack of comparison groups.

The type of assessment used to measure religious commitment could explain the discrepancy between the current study and previous research. The current study employed the Religious Commitment Inventory-10 while other studies assessed religious commitment through measures such as the Religious Belief Questionnaire or through qualitative methods. Studies which employed qualitative methods could have gained a greater understanding of an individual's religious commitment through the use of Socratic questioning compared to the assessment tool used in this study.

A second factor that may have played a role in the non-significant results in this study is the paucity of non-Adventists in the sample. Ninety-seven percent of respondents in this study identified themselves as Seventh-day Adventist. Thus, the group of respondents who identified themselves either as affiliated with another religion or as non-religious may have been too small to accurately make comparisons.

Finally, the results of the current study could also have been confounded by what appears to be an over-representation of highly religious individuals in the sample. The over-representation may have not given the true picture of religious commitment of the Seventh-day Adventists who were the majority participants in the current study. Nearly 60% responded to questions on the Religious Commitment Inventory-10 with ‘Mostly True of Me’ or ‘Totally True of Me’. Some examples of questions that were answered in this way were: *I often read books and magazines about my faith, Religious beliefs influence all my dealings in life, It is important to me to spend periods of time in private religious thought and reflection, I enjoy working in the activities of my religious affiliation and I keep well informed about my local religious group and have some influence in its decisions.* To the extent that these responses do not adequately capture the religiosity of Adventists in general, the findings might not be precise.

In sum, lack of significant results regarding religious commitment and body image may be attributed to the measurements used to assess religious commitment, to an over-representation of highly religious participants in the current study, and to a lack of comparison groups due to the sample used.

### **Conclusions**

The current study suggests that women may be feeling better about their bodies than previous generations, and that ethnic identity is becoming less important within the new generation of women in college. Results also provide confirmation that sociocultural pressure and internalization of the thinness ideal are correlates of body dissatisfaction. Further, appearance evaluation, overweight preoccupation, self-classified weight and body area satisfaction correlated with each other. Additionally, this study did not find a

link between body image satisfaction and religiosity. The section below discusses these issues.

Recall that participants in the study overall presented with a positive body image. Additionally, these women expressed positive feelings about their bodies, had lower preoccupation with their weight, classified their weight as “normal,” and were moderately satisfied with all areas of their body. These results help to suggest that body image concerns among undergraduate females may be dissipating. As suggested above, could it be that with the advent of social media and increased representation of differing body types on television and movies, women are experiencing less pressure to conform to the thinness ideal?

Concerning ethnic identity, the females in this study had low interest and little awareness of their own ethnicity. For some of these individuals, their families had stayed in America for more than four generations, and were thus less likely to be inclined to place importance on their ethnic identities. Consequently, ethnic heritage may not be a salient characteristic in which the respondents identified themselves with. These results may provide insight into the identity development of undergraduates.

Consistent with previous research, this study found that internalization of the thinness ideal and sociocultural pressure are correlates of body dissatisfaction. However, religiosity did not prove significant. As mentioned above, results from the current study could have been confounded by the lack of comparison groups and lack of variation on the religious commitment of the participants. It is also possible that religious commitment may be less of a protective factor against body dissatisfaction than once thought.

## **Recommendations for Further Study**

Several recommendations for future research in this area are suggested.

Specifically, there are four recommendations that might be considered as extensions to this study and hold the potential to further advance findings in this area.

First, future studies should explore whether the Seventh-day Adventist culture serves as a protective factor against body image dissatisfaction. The current sample was a very homogenous group made up of 96.8% Seventh-day Adventist respondents. It would be important to explore if this culture, family structure, and/or community support play a role in protecting females from developing body dissatisfaction.

Second, future research should examine if religious commitment does indeed serve as a protective factor against body dissatisfaction. Due to the lack of comparison groups in the current study, future research needs to focus on making comparisons between religions (i.e., Catholics and Muslims) and perhaps those who identify as not-religious. Additionally, it would be imperative that a study include respondents with both high and low religious commitments. This would enable researchers to determine if there is a connection between religious commitment and body image satisfaction.

Third, future research should explore more thoroughly how young adults view ethnicity and what are the important influences on how they identify themselves in today's world. Previous research has found a relationship between body dissatisfaction and ethnicity; this study, however, did not identify such a link. This may be due to individuals defining themselves in broader terms rather than based on ethnicity. With the advent of the internet and social media sites (Facebook, Twitter, etc.) people may be defining themselves more globally. Social media sites are inundated with photographs of individual of all shapes and sizes, possibly changing the way the world sees beauty.

These sites show people from all walks of life, not just those who embody the thinness ideal. So it might be important to examine if social media sites contribute to greater body satisfaction among female college students.

Some of the findings of this study are inconsistent with the findings of previous studies on the ethnic identity of various groups. This study suggests that the differences could be due to newness of the measures used to assess ethnic identity or the age of studies that have been conducted. However, more research could be conducted to confirm or deny these suppositions. Additional research should likewise occur to determine whether geographic location affects ethnic identity levels. To this end, this study should be replicated elsewhere – in colleges and other settings – to determine whether the findings are unique to survey participants or generalizable to larger populations.

### **Recommendations for Practice**

Beyond research, this study points to avenues for improving practice in psychology. Although this study did not support previous research which suggested that body image concerns were prevalent amongst the college population, it is still important to practitioners to assess such issues. It would be important to have this information in order to make an accurate diagnosis, and case conceptualization leading to treatment.

It would also be recommended that the therapist complete a thorough assessment that looks at various components of identity (ethnic, spiritual, family, social, etc.). By being able to determine how an individual views herself, within one's community and family heritage, practitioners might gain greater insight into the client's beliefs that influence them greatly, and be better able to develop a more accurate treatment protocol.

In order for females to continue to be inoculated from less internalization of the thinness ideal and experience less pressure to conform to societal standards of beauty, it is also recommended that parents and educators continue to discuss and dissect the standards of beauty set forth by society. It is recommended that parents and educators continue to praise children on all of their positive attributes and not place a high emphasis on physical appearance. By following these recommendations, body image concerns may continue to decrease over time.

### **Summary**

Concerns about body image have persisted in the society for many decades. The media, families, and peers have bombarded women regarding acceptable beauty standards. Literature too has focused on many aspects of body image dissatisfaction. These studies have concentrated mainly on Caucasian and African American women's body image concerns, giving little regard to Asian, Hispanic, and West Indian/Caribbean women. The aim of the current study was to explore the body image of Caucasian, African American, Hispanic, Asian, and West Indian/Caribbean females, as well as examine possible correlates including ethnic identity, religious commitment, and internalization of the thinness ideal and sociocultural pressure.

The results from this study offered support for some of the previous research while at the same time it did not support others. The undergraduate females in this study displayed positive feelings about their bodies, had a low preoccupation with their weight, classified their body weight as "normal," and were moderately satisfied with all areas of their bodies. Additionally, results found that females who do not subscribe to the cultural thinness ideal and who do not feel social pressure to be thin have higher body

satisfaction, evaluate their appearance more favorably, were less pre-occupied with their weight, and were less likely to rate themselves as being overweight. These results indicated that body dissatisfaction among the participants was not prevalent. The women in my study seem to internalize the thinness ideal to a lesser extent than expected and feel less social pressure to conform to these standards than did the populations in other studies.

It was hypothesized that ethnic identity and religious commitment would serve as protective factors against body image dissatisfaction. The hypothesis was not confirmed. Neither ethnic identity nor religious commitment was a contributing factor in body satisfaction. The majority of the participants whose families had stayed in the United States for more than four generations were Seventh-day Adventists (96.8%). These participants had recorded body image satisfaction. It is possible that as a society, we are now defining beauty in more flexible and fluid terms.

The findings of this study found that body image is not a major psychological problem for the participants in this study. The study showed that Caucasian females did not have greater body dissatisfaction, were not more dissatisfied with areas of the body, were not more preoccupied with their weight, and were not more likely to classify themselves as overweight compared to African American, West Indian/Caribbean, Hispanic American, and Asian American women.

The findings showed that Caucasian American females were not significantly different from African American, West Indian/Caribbean American, and Hispanic American women in their ethnic identity. However, Asian American females have higher ethnic identity compared to Caucasian women. The results showed further that there is no

relationship between ethnic identity and generational distance from original land of origin. Finally, the results established that the strength of ethnic identity has no bearing on body satisfaction. Individuals with a strong ethnic identity were not more likely than those with lower ethnic identity to display greater body satisfaction or to be more satisfied with areas of the body. They were also not less likely to be preoccupied with their weight, classify themselves as normal weight, or feel less sociocultural pressure to conform to the thinness ideal. Strong ethnic identities are also not likely to trigger a stronger religious commitment among individuals with a strong ethnic identity compared to individuals who have a weak ethnic identity regardless of ethnicity. Overall, the influence of ethnic identity on body image is negligible.



APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

# Andrews University

May 6, 2008

Jennifer L Dabros  
500 Garland, Apt. B-1  
Berrien Springs, MI 49103

Dear Jennifer,

**RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS**  
**IRB Protocol #:** 08-047      **Application Type:** Original      **Dept:** Educational & Counseling Psy  
**Review Category:** Exempt      **Action Taken:** Approved      **Advisor:** Nancy Carbonell  
**Protocol Title:** The Influence that Ethnic Identity Has on the Body Image of Undergraduate Females

This letter is to advise you that the Institutional Review Board (IRB) has reviewed and approved your proposal for research. You have been given clearance to proceed with your research plans.

All changes made to the study design and/or consent form, after initiation of the project, require prior approval from the IRB before such changes can be implemented. Feel free to contact our office if you have any questions.

The duration of the present approval is for one year. If your research is going to take more than one year, you must apply for an extension of your approval in order to be authorized to continue with this project.

Some proposal and research design designs may be of such a nature that participation in the project may involve certain risks to human subjects. If your project is one of this nature and in the implementation of your project an incidence occurs which results in a research-related adverse reaction and/or physical injury, such an occurrence must be reported immediately in writing to the Institutional Review Board. Any project-related physical injury must also be reported immediately to University Medical Specialties, by calling (269) 473-2222.

We wish you success as you implement the research project as outlined in the approved protocol.

Sincerely,

Michael D Pearson  
Administrative Associate  
Institutional Review Board  
Cc: Nancy Carbonell

Institutional Review Board  
(269) 471-6360 Fax: (269) 471-6246 E-mail: [irb@andrews.edu](mailto:irb@andrews.edu)  
Andrews University, Berrien Springs, MI 49104-0355

# Andrews University

Institutional Review Board  
(269) 471-6361 Fax: (269) 471-6246 E-mail: [irb@andrews.edu](mailto:irb@andrews.edu)  
Andrews University, Berrien Springs, MI 49104-0355

August 26, 2010

Jennifer L. Dabros  
4225 Pebble Ridge Circle Apt 67  
Colorado Springs, CO 80906  
Tel: 719-527-4344, 719-572-6430  
Email: [dabrosj@andrews.edu](mailto:dabrosj@andrews.edu)

**RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS**  
**IRB Protocol #:** 10-073 (Original: 08-047)    **Application Type:** Extension    **Dept:** Ed & Counseling Psych.  
**Review Category:** Exempt    **Action Taken:** Approved    **Advisor:** Nancy Carbonell  
**Title:** The relationship between body image and ethnic identity in undergraduate females at a Seventh - day  
Adventist University

This letter is to advise you that the Institutional Review Board (IRB) has approved your requested changes to your proposal #08-047. Because this was inactive, we have assigned a new protocol number (10-073) and ask that you refer to this new protocol number in any future correspondence. The duration of this approval is for one year. If your research is not completed by the end of this period you must apply for an extension.

Any future changes made to the study design and/or consent form require prior approval from the IRB before such changes can be implemented.

While there appears to be no risks with your study, should an incidence occur which results in a research-related adverse reaction and/or physical injury, this must be reported immediately in writing to the IRB. Any project-related physical injury must also be reported immediately to the University physician, Dr. Loren Hamel, by calling (269) 473-2222.

We wish you success as you continue with your research project as outlined in the approved protocol.

Please feel free to contact our office if you have questions.

Sincerely,

*Sarah Kimakwa*

Sarah Kimakwa  
Administrative Assistant  
Office of Research & Creative Scholarship

APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE

Age: \_\_\_\_\_

Year in School: \_\_\_\_\_

Marital Status:       \_\_\_ Single  
                          \_\_\_ In a committed relationship  
                          \_\_\_ Married  
                          \_\_\_ Divorced

My ethnicity is:       \_\_\_ White, Caucasian, Anglo, European American, Not Hispanic  
                          \_\_\_ Black, African American, Not West Indian or Caribbean  
                          \_\_\_ West Indian, Caribbean  
                          \_\_\_ Hispanic, Latina  
                          \_\_\_ Asian or Asian American  
                          \_\_\_ Other \_\_\_\_\_

Please Specify

How long has your family been in the United States?

- \_\_\_ I am a foreign exchange student
- \_\_\_ I immigrated to the United States
- \_\_\_ I am a first generation American
- \_\_\_ I am a second generation American
- \_\_\_ I am a third generation American
- \_\_\_ My family has been in the United States for four generations or more.

My religious preference is:

- \_\_\_ Baptist
- \_\_\_ Buddhist
- \_\_\_ Catholic
- \_\_\_ Hindu
- \_\_\_ Jewish
- \_\_\_ Lutheran
- \_\_\_ Methodist
- \_\_\_ Muslim
- \_\_\_ Pagan
- \_\_\_ Protestant
- \_\_\_ Seventh Day Adventist
- \_\_\_ Other: \_\_\_\_\_

APPENDIX C

PROTOCOL

The following pages contain a series of statements about how people might think, feel, or behave. Read each statement carefully and decide how much it pertains to you personally.

1	2	3	4	5
<b>Definitely Disagree</b>	<b>Mostly Disagree</b>	<b>Neither Agree Nor Disagree</b>	<b>Mostly Agree</b>	<b>Definitely Agree</b>

- \_\_\_\_\_ 1. My body is sexually appealing.
- \_\_\_\_\_ 2. I constantly worry about being or becoming fat.
- \_\_\_\_\_ 3. I like my looks just the way they are
- \_\_\_\_\_ 4. I am very conscious of even small changes in my weight.
- \_\_\_\_\_ 5. Most people would consider me good-looking.
- \_\_\_\_\_ 6. I like the way I look without my clothes on.
- \_\_\_\_\_ 7. I like the way my clothes fit me.
- \_\_\_\_\_ 8. I dislike my physique.
- \_\_\_\_\_ 9. I am physically unattractive.
- \_\_\_\_\_ 10. I am on a weight-loss diet.

**For the remainder of the items use the response scale given with the item, and enter your answer in the space beside the item.**

- \_\_\_\_\_ 11. I have tried to lose weight by fasting or going on crash diets.
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Very Often
  
- \_\_\_\_\_ 12. I think I am:
  - 1. Very Underweight
  - 2. Somewhat Underweight
  - 3. Normal Weight
  - 4. Somewhat Overweight
  - 5. Very Overweight
  
- \_\_\_\_\_ 13. From looking at me, most other people would think I am:
  - 1. Very Underweight
  - 2. Somewhat Underweight
  - 3. Normal Weight
  - 4. Somewhat Overweight
  - 5. Very Overweight

**14-22 Use this 1 to 5 scale to indicate how dissatisfied or satisfied that you are with each of the following areas or aspects of your body.**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Very Dissatisfied</b>	<b>Mostly Dissatisfied</b>	<b>Neither Satisfied Nor Dissatisfied</b>	<b>Mostly Satisfied</b>	<b>Very Satisfied</b>

- \_\_\_\_\_ 14. Face (facial features, complexion)
- \_\_\_\_\_ 15. Hair (color, thickness, texture)
- \_\_\_\_\_ 16. Lower torso (buttocks, hips, thighs, legs)
- \_\_\_\_\_ 17. Mid torso (waist, stomach)
- \_\_\_\_\_ 18 Upper torso (chest or breasts, shoulders, arms)
- \_\_\_\_\_ 19. Muscle tone
- \_\_\_\_\_ 20. Weight
- \_\_\_\_\_ 21. Height
- \_\_\_\_\_ 22. Overall appearance

**Use the numbers below to indicate how much you agree or disagree with each statement**

<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>

- \_\_\_\_\_ 23. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.
- \_\_\_\_\_ 24. I am active in organizations or social groups that include mostly members of my own ethnic group.
- \_\_\_\_\_ 25. I have a clear sense of my ethnic background and what it means for me.
- \_\_\_\_\_ 26. I think a lot about how my life will be affected by my ethnic group membership.
- \_\_\_\_\_ 27. I am happy that I am a member of the group I belong to.
- \_\_\_\_\_ 28. I have a strong sense of belonging to my own ethnic group.
- \_\_\_\_\_ 29. I understand pretty well what my ethnic group membership means to me.
- \_\_\_\_\_ 30. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.
- \_\_\_\_\_ 31. I have a lot of pride in my ethnic group.



- \_\_\_\_\_ 32. I participate in cultural practices of my own group, such as special food, music, or customs.
- \_\_\_\_\_ 33. I feel a strong attachment towards my own ethnic group.
- \_\_\_\_\_ 34. I feel good about my cultural or ethnic background.

**Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Definitely Disagree</b>	<b>Mostly Disagree</b>	<b>Neither Agree Nor Disagree</b>	<b>Mostly Agree</b>	<b>Definitely Agree</b>

- \_\_\_\_\_ 35. I do not care if my body looks like the body of people who are on TV.
- \_\_\_\_\_ 36. I compare my body to the bodies of people who are on TV.
- \_\_\_\_\_ 37. I would like my body to look like the models who appear in magazines.
- \_\_\_\_\_ 38. I compare my appearance to the appearance of TV and movie stars.
- \_\_\_\_\_ 39. I would like my body to look like the people who are in movies.
- \_\_\_\_\_ 40. I do not compare my body to the bodies of people who appear in magazines.
- \_\_\_\_\_ 41. I wish I looked like the models in music videos.
- \_\_\_\_\_ 42. I compare my appearance to the appearance of people in magazines
- \_\_\_\_\_ 43. I do not try to look like the people on TV.

**Please circle the response that best captures your own experience:**

	none	some	a lot
44. I've felt pressure from my friends to lose weight	1	2	3 4 5
45. I've noticed a strong message from my friends to have a thin body	1	2	3 4 5
46. I've felt pressure from my family to lose weight	1	2	3 4 5
47. I've noticed a strong message from my family to have a thin body	1	2	3 4 5
48. I've felt pressure from people I've dated to lose weight	1	2	3 4 5
49. I've noticed a strong message from people I've dated to have a thin body	1	2	3 4 5
50. I've felt pressure from the media (e.g., TV, magazines) to lose weight	1	2	3 4 5
51. I've noticed a strong message from the media to have a thin body	1	2	3 4 5
52. Family members tease me about my weight or body shape	1	2	3 4 5
53. Kids at school tease me about my weight or body shape	1	2	3 4 5

**Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Not at all True of me</b>	<b>Somewhat True of me</b>	<b>Moderately True of me</b>	<b>Mostly True of me</b>	<b>Totally True of me</b>

- \_\_\_ 54. I often read books and magazines about my faith.
- \_\_\_ 55. I make financial contributions to my religious organization.
- \_\_\_ 56. I spend time trying to grow in understanding of my faith.
- \_\_\_ 57. Religion is especially important to me because it answers many questions about the meaning of life.
- \_\_\_ 58. My religious beliefs lie behind my whole approach to life.
- \_\_\_ 59. I enjoy spending time with others of my religious affiliation.
- \_\_\_ 60. Religious beliefs influence all my dealings in life.
- \_\_\_ 61. It is important to me to spend periods of time in private religious thought and reflection.
- \_\_\_ 62. I enjoy working in the activities of my religious affiliation.
- \_\_\_ 63. I keep well informed about my local religious group and have some influence in its decisions.

APPENDIX D

LETTERS TO PARTICIPANTS AND ANDREWS  
AGENDA ANNOUNCEMENT

## **Introduction Letter**

September 15, 2010

Dear Resident:

The topic of body image has been very prominent in both scientific literature and popular culture. However, no one has ever asked for the opinion of females attending a Seventh Day Adventist University.

You are invited to participate in a study that focuses on the body image, ethnic identity and religious commitment of students at Andrews University. Your opinion on these subjects is extremely important and will be beneficial to the field of psychology.

For your participation in this study, you will be entered into a drawing to win 1 of 5, \$100 cash prizes! Please take a few minutes to answer the survey questions. Place your completed survey in the enclosed envelope. Postage on the return envelope is already paid.

Your opinion is of great value to the field of psychology, and thank you in advance for your participation.

If you have any questions, please feel free to contact me at (630) 639-6395.

Sincerely,  
Jennifer L. Dabros, M.A.  
Doctoral Student in Counseling Psychology  
Andrews University

## **Letter 2**

October 1, 2010

Dear Resident:

On September 15, 2010, you received an invitation to participate in a study focusing on the body image, ethnic identity, and religious commitment of students attending Andrews University. If you have already taken the time to complete and return the survey, thank you. Your participation is greatly appreciated!!

If you have yet to complete the survey, there is still time to have your voice heard. Your input on this subject matter is greatly desired and would be extremely beneficial to the psychological community.

For your participation in this study, you will be entered into a drawing to win 1 of 5, \$100 cash prizes! Please take a few minutes to answer the survey questions. Place your completed survey in the enclosed envelope. Postage on the return envelope is already paid.

Your opinion is of great value to the field of psychology, and thank you in advance for your participation.

If you have any questions, please feel free to contact me at (630) 639-6395.

Sincerely,  
Jennifer L. Dabros, M.A.  
Doctoral Student in Counseling Psychology  
Andrews University

### Letter 3

October 15, 2010

Dear Resident:

On October 1, 2010, you received an invitation to participate in a study focusing on the body image, ethnic identity, and religious commitment of students attending Andrews University. If you have already taken the time to complete and return the survey, thank you. Your participation is greatly appreciated!!

If you have yet to complete the survey, there is still time to have your voice heard. Your input on this subject matter is greatly desired and would be extremely beneficial to the psychological community.

For your participation in this study, you will be entered into a drawing to win 1 of 5, \$100 cash prizes! Please take a few minutes to answer the survey questions. Place your completed survey in the enclosed envelope. Postage on the return envelope is already paid.

Your opinion is of great value to the field of psychology, and thank you in advance for your participation.

If you have any questions, please feel free to contact me at (630) 639-6395.

Sincerely,  
Jennifer L. Dabros, M.A.  
Doctoral Student in Counseling Psychology  
Andrews University

### Announcement placed in Andrews Agenda

Attention Female Undergraduate Students: **Would you like to win \$100??** It only takes 20 minutes of your time!!! You are invited to participate in an on-line survey that focuses on the body image, ethnic identity and religious commitment of female undergraduates at Andrews University. Please complete the survey at: <http://www.surveymonkey.com/s/V66HWTF> to be entered in a drawing to win 1 of 5 \$100 cash prizes!!! Your opinion is of great value to the field of psychology! Thanks in advance for your participation!

## REFERENCE LIST

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