# ATTITUDES TOWARDS BODY SIZE AND PHYSICAL APPEARANCE AMONG COLOMBIAN AND AMERICAN COLLEGE STUDENTS: A MULTI-CULTURAL STUDY

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**ABSTRACT**

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The current study analyzed attitudes towards size and physical appearance among four hundred and seventy Colombian and two hundred and ten American college students. The effects of gender and culture (and their interaction) on thin ideal internalization, sociocultural pressure to be thin, and body image dissatisfaction were examined in the sample. Results from the study showed that there are differences between gender and country: Colombian students perceived themselves as having a better body image overall compared to American students; females from both countries had a lower body image satisfaction compared to males. Surprisingly, males from both countries worry about their physical size and appearance. Implications for future research include validating instruments especially for a Colombian population, as well as continuing to include males

in studies related to body image and eating disorders because it was found that they were also unsatisfied with their overall body image.

# CHAPTER I

## INTRODUCTION

During the last decade there has been increased attention given to body image as observed in the literature from diverse professional areas including, psychology, anthropology, medicine, sociology, among others. Additional interest has been present in the general public and media, in western societies specially the United States and Europe. Much of the burgeoning literature pertains to body image in relation to eating disorders and obesity. However, the opinion of some authors in the field (Cash & Pruzinsky, 2002), strongly suggests that the range of inquiry into understanding how body image affects quality of life must be far broader (Cash & Pruzinsky, 2002; Grogan, 2008).

Several controversies and inconsistent findings have permeated the literature on body image (Button, Fransella, & Slade, 1977, Huon & Brown, 1986, Cash & Brown, 1987, Cooper & Taylor, 1988, Hsu & Sobkiewicz, 1991, & Slade, 1994, cited by Cash & Deagle, 1997). First, body image is a concept far more complex than implied by Schilder's definition as "the picture of our own body which we form in our own mind" (1935/1950, p.11, cited by Cash & Pruzinsky, 2002). Additionally, since the last decade of the 20$^{th}$ century, Thompson and colleagues (1999, as cited by Cash & Pruzinsky, 2002), noted that there were many definitions of body image such as weight satisfaction, size perception accuracy, body satisfaction, appearance satisfaction, appearance

evaluation, appearance orientation, body esteem, body concern, body dysphoria, body dysmorphia, body schema, body percept, body distortion, body image, body image disturbance, and body image disorder (p. 10, cited by Cash & Pruzinsky, 2002), and the list could be even longer.

Body image has been defined in numerous ways, however most authors agree that body image is multidimensional and includes physiological, psychological and sociological components (Cash, 1994, Cash & Pruzinsky, 1990, Parks & Read, 1997, cited by Hoyt & Kogan, 2002). There are two main components of body image: perceptual and attitudinal. Perceptual body image is the ability to visualize one's body in front, side, and back views, and one can feel one's body as an integrated percept, without separately experiencing the contributions of touch, position sense, and balance. It makes references to the estimation of the size and appearance of body. Attitudinal body image includes feelings and attitudes towards one's own body. Is generally classified into four components: (1) global subjective dissatisfaction or disturbance –refers to overall satisfaction –dissatisfaction with one's appearance; (2) affective distress regarding appearance – refers to one's emotions about one's appearance, including anxiety, dysphoria, and discomfort; (3) cognitive aspects of body image – refers to investment in one's appearance, erroneous thoughts or beliefs about one's body, and body image schemas; and (4) behavioral avoidance reflective of dissatisfaction with appearance – refers to avoidance of situations or objects due to their elicitation of body image concerns (Thompson, & Van Den Berg, 2002, cited by Cash & Pruzinsky, 2002). In the current study, attention was placed on the first component of the attitudinal aspect of body image: global subjective dissatisfaction or disturbance for both males and females college

students from Colombia and The United States.

*Global subjective body image dissatisfaction or disturbance*

The first component of attitudinal body image includes disturbances or dissatisfaction with one's appearance as mentioned before. Body image disturbance include perceptual, affective, and cognitive aspects, defined by an exaggerated preoccupation for any defect, imaginary or overestimated in the physical appearance (Cash & Pruzinsky, 2002; Grogan, 2008). Body image disturbance ranges from minor to severe dissatisfaction about real or perceived physical flaws (Thompson & Gray, 1995).

Body image disturbance has been found in patients treated for eating disorders, specifically for Anorexia Nervosa. These patients are extremely dissatisfied with their size, shape or some other aspect of body appearance (Cash & Deagle, 1997). While body image dissatisfaction can lead normal weight people to diet (Guyon, 1996, Allaz et al., 1998, & Wardle & Johnson, 2002, cited by Paquette & Raine, 2004), and develop eating disorders (Thompson, Heinberg, Altabe, & Tantle-Dunn, 1998, cited by Paquette & Raine, 2004), body image has also been associated with unhealthy weight loss practices (Lameiras Fernandez, Calado Otero, Rodriguez Castro, Fernandez Pietro, 2003; Battle & Brownell, 1996, cited by Paquette & Raine, 2004), restrained eating (Paa & Larson, 1998, cited by Paquette & Raine, 2004), depression (Perlick & Silverstein, 1994, Wiederman & Hurst, 1998, Pinhas, Toner, Ali, Garfinkel, & Stuckless, 1999, cited by Paquette & Raine, 2004), poor self-esteem (Tiggeman & Stevens, 1999, cited by Paquette & Raine, 2004), interpersonal and sexual difficulties, unhealthy reliance on cosmetic surgery, and unsupervised use of medication to control weight and size (e.g., amphetamines, steroids) (Thompson & Heinberg, 1999).

*Body image and eating disorders*

As mentioned previously, body image disturbance has appeared as one of the most potent risk factors for the development and maintenance of eating disorders as it was mentioned before. Hilde Brunch (1962, cited by Cash & Deagle, 1997) has been credited as being the first to recognize dysfunctional body image disturbances as a core feature of eating disorders, particularly in anorexia nervosa. The broad construct of dysfunctional body image disturbances refers to (1) internalization of the socioculturally prescribed body image ideal (thin-ideal internalization), (2) negative subjective evaluations of one's physical appearance (body dissatisfaction), and (3) distorted perceptions of body image (body image distortions) (Stice 2002, in Cash & Pruzinsky, 2002). Specifically, the core features of eating disorders include: disturbance in body image (e.g., overevaluation of thinness – thin ideal, weight or shape concerns); over-or undercontrol of eating (e.g., severe dietary restriction, binge eating); and, extreme behaviors to control weight or shape (e.g., compulsive exercise, purging) (Striegel-Moore & Bulik, 2007).

During the past two decades, a burgeoning clinical and scientific interest in body image from the United States and Western Europe has fueled empirical investigations of eating disorders among women (Pruzinsky & Cash, 2002, cited by Grabe & Hyde, 2006). Currently, it has been reported in multiple studies that young adults manifest affinity to a determined body shape characterized by the contemporary society, which leads to an excessive worry about the body and increases development of risk behaviors that include eating disorders (Rodriguez Guarin & Gempeler Rueda, 1999; Lameiras Fernandez et al., 2002; Rivarola, 2003; Ochoa Hoyos, 2007).

*Body Image and Thin Internalization*

According to Stice (2002), another factor influencing the development of an eating disturbance in both females and males is an elevated pressure to be thin. Pressure to be thin is thought to lead to body dissatisfaction, as repeated external and internal messages that one is not thin enough likely causes discontent with one's body. As shown in a meta-analysis by Groesz, Levine, & Murnen, (2002, cited by Stice, 2002), exposure to thin-ideal images resulted in immediate increases in body dissatisfaction. The authors found that adverse effects of exposure to thin-ideal images were significantly stronger for women with initial elevations in body dissatisfaction, versus women who were satisfied with their bodies. Groesz et al., (2002, cited by Stice, 2002), concluded that individuals with preexisting body dissatisfaction may be more likely to engage in social comparisons with thin models that might result in more adverse effects from media exposure.

Furthermore, pressure to be thin may directly promote dieting in the absence of body dissatisfaction because an individual might believe that dieting behavior would reduce social pressure to be thin (Stice, 2002). Pressure to be thin can come from a variety of sources, including the mass media, families, and peers. These pressures take numerous forms, such as praise of ultraslender fashion models, direct messages that one should lose weight (e.g., weight-related teasing), and indirect influences to conform to the ideal (e.g., a friend's persistent obsessions about weight and appearance). The consequences may include an internalization of the current thin-ideal, elevated investment in appearance, and a generalized belief that being thin will result in an excess of social and interpersonal benefits (e.g., greater personal acceptance and enhanced career success). Additionally, pressures to be thin and their internalization are thought to

promote body dissatisfaction because this ideal is virtually unattainable for most individuals (Stice, 2002, in Cash & Pruzinsky, 2002).

Images in print and film media have depicted thinner and thinner women during this same time period and as a result adolescents and young adults have become increasingly dissatisfied with their physical appearance. The relationship between media effects and body image dissatisfaction has been difficult to elucidate. However, recent studies have provided convincing evidence that media images play a significant role in how these women feel about their bodies (Shaw & Stein, 1994, Grogan, Williams, & Conner, 1996; Grogan, 1999; Stice, Schupak-Neuberg, cited by Hoyt & Kogan, 2002). Research has been mainly focused in Caucasian adolescents and young adult women affected by eating disorders; however, in reality no ethnic or socioeconomic group is immune. Typically, studies do not include ethnically diverse populations; therefore, cases of eating disorders among Hispanics are often underreported (Striegel-Moore, & Smolak, 2000).

The first hypothesis for the present study stated that there would be an interaction between country and gender, when predicting thin ideal internalization such that women from the US will present higher levels of thin ideal internalization, followed by Colombian females and then by males from both countries. Increased emphasis on factors like being thin is warranted as it appears that the prevalence of eating disorders may be increased dramatically among all social classes and ethnic groups in the United States as well as in a number of other nations with diverse cultures like Latin American countries (Pate, Pumariega, Hester, & Garner, 1992, Hsu, 1996; cited by Gleaves et al., 2000).

*Body Image and Culture*

Increasing attention has been given to the role of sociocultural influences in the etiology of eating disorders and body image disturbance (Smith & Krejci, 1991, Pate, Pumariega, Hester & Garner, 1992, Raich et al., 1992, Toro, Salamero, & Martinez, 1994, Craig, Swiumbrun, Matenga-Smith, Matangi, & Vaughan, 1996, Greenberg & LaPorte, 1996, Thompson, Sargent, & Kemper, 1996, Parnell et al., 1996,Altabe, 1998; Brewis, McGarvey, Jones, & Swimburn, 1998, cited by Gleaves et al., 2000).

The sociocultural perspective is an approach to comprehend human behavior that focuses on how cultural values influence individual values and behavior. It refers to a variety of theoretical approaches that explain how cultural values are important in understanding how individuals are perceived by others and how they perceive themselves. The sociocultural model theory's premise is that social pressures (e.g., media, friends, family) are the catalyst for an individual's desire to conform to unrealistic physical standards, which are difficult to achieve without dieting, exercise, or both (Thompson et al., 1999, cited by Hausenblas & Fallon, 2006). For example, if the culture values attractiveness in its members, then individuals will value attractiveness in themselves and others (Jackson, 2002, cited by Cash & Pruzinsky, 2002).

In affluent Western societies, slenderness is generally associated with happiness, success, youthfulness, and social acceptability (McKinley, 2002 cited by Cash & Pruzinsky, 2002). Being overweight is linked to laziness, lack of willpower, and being out of control. For women in these societies, the ideal body is slim; for men the ideal is slenderness and moderate muscularity. Within Western industrialized countries, there have

been many changes over the years in the body shape and size that is considered attractive and healthy, especially for women (Grogan, 2008).

A specific study that explored the relationship between eating patterns and body image perception in two different cultural groups comparing Dutch and Colombian teenagers found that the way teenage girls perceive their body is mediated by the body ideal image promoted through mass media similarly for both countries. As reported, in Colombia, adolescents use their bodies as an attempt to gain power and control because they perceived more pressure from family and peers compared to teenagers from the Netherlands (Ochoa Hoyos, 2007). Additional findings included that female adolescents from Colombia perceived their ideal body as a symbol to have power and control and maintain an identity. As reported in the results of the aforementioned study, Dutch girls claimed that being skinny is their body image ideal and that, depending on how they eat they will become overweight or not. One Dutch adolescent was quoted as saying: "eating well will lead to an attractive/healthy body shape" (Ochoa Hoyos, 2007, p.114). In the results among Colombian teenagers, dieting was viewed differently. The reasons for dieting included social acceptance, status, increased access to relationships with males and increased sexual awareness. It is not uncommon for Colombian teenagers to have supervised diets and most Colombian teens agree that dieting is not negative and/or is not associated with poor health (Ochoa Hoyos, 2007). Additionally, for Colombian adolescents it was found that being overweight was seen as ugliness and an obstacle for a relationship with a male (Ochoa Hoyos, 2007).

In the case of body dissatisfaction, similarities were found in these two countries. Adolescents agreed that they were concerned about their bodies, and that the ideal female

body is defined by influences from the opposite sex, mass media and peers. Colombian teenagers reported being frustrated because the kind of model that is broadcasted in Colombia is a tall, blondes and light-eye women, different from the dark haired, brown-eyed, shorter traditional women. They admitted to be very concerned about what boys think about them; additionally, they were more concerned with different areas of their bodies wanting bigger breasts, thin abdomen, big and firm buttocks and legs (Ochoa Hoyos, 2007).

Cultural factors found in Colombia such as a being a patriarchy society, having a marked feminine role, belonging to a middle high socio economic status and being a receptor of mass media coming from other developing countries especially the United States, have been explored in the research done about disturbed eating and body image in that country (Rodriguez Guarin, & Gempeler Rueda, 1999; Noreña, Rojas & Novoa, 2006; Uribe, 2006; Cano et al., 2007; Fandiño et al., 2007; Ochoa Hoyos, 2007). Empirical findings specific to Colombia have measured the risk for developing eating disorders as a consequence of the increasing attention that attractiveness has placed in the population, especially in high school and college students. Risk factors found present in Colombian population include being female, desire to be thin, fear of increase their weight, exercise as a diet method and not for their health, feeling guilty after eating, frequent dieting, being overweight, eating in excess when worried, purging and over-exercise (Cano et al., 2007; Fandiño et al., 2007).

As explained by Ochoa Hoyos (2007), Colombia is still a very patriarchal society where men frequently objectify women. As cited by Ochoa Hoyos (2007), Seppa affirmed: "is a patriarchal culture, women learn to look at themselves through the

heterosexual male perspective" (p. 116, Ochoa Hoyos, 2007). Related to the concept of patriarchy, Hispanic cultural factors such as adherence to a more traditional feminine gender role, which is associated with concern about body image, may lead Hispanic women to experience levels of dissatisfaction comparable to those found among Caucasian women in the U.S. (Avila & Avila, 1995, cited by Grabe & Hyde, 2006).

Another study from an anthropologic perspective done in Medellin, Colombia by Uribe (2006), reported that dieting has a significant social value that has been modified during the last decade with globalization and technical development. Fast food is without a doubt the most important variation introduced into the diet of the young adolescents in Colombia. This is dependent upon the high socioeconomic class, who has also reported more dissatisfied body image (Uribe, 2006). Studies such as these, could explain how globalization of the media and its effects, affect people's focus on patterns of beauty and thinness characterized from developed western countries (Uribe, 2006).

Although Colombia and the United States are considered Western countries, there might be differences in the way young adults perceive their bodies and how they cope with the social pressure to achieve an ideal body as explained by the sociocultural model. In the United States, the term "Hispanic" is used to refer to groups with backgrounds ranging from South America to the Caribbean. Although there may be some generalities about Hispanic culture, each national group is unique (Altabe & O'Garo, 2002; Molinary, 2007). As a cultural group, Hispanics are heavily exposed to mainstream U.S. culture both in the United States and in their native countries. Colombia is a western country that has received the influence of developed countries especially the U.S throughout the media. Hispanic culture itself is changing with regard to body image. U.S. culture (movies, T.V. and other

products) is heavily exported to Latin American countries. Over time the images seen through the media influence the culture. Support for the idea that Hispanic culture has adopted a thin ideal comes from facts such as the increased incidence of eating disorders in Latin American countries (Altabe & O'Garo, 2002; Molinary, 2007).

The second hypothesis that was conducted for the current study was an interaction between country and gender, when predicting socio cultural pressure to be thin such that females would report higher perception of socio cultural pressure to be thin compared to males, followed by Colombian females and males from both countries.

*Body image and gender*

Gender is a salient factor in body image development (Fisher, 1986, Cash & Pruzinsky, 1990, Jackson, 1992, & Thompson, 1996, cited by Cash & Deagle, 1997). Jackson's (1992, cited by Cash & Deagle, 1997) review concluded that, throughout the life span, women from adolescence to adulthood are more body-dissatisfied because they often view themselves as unacceptably overweight, even at average weight levels (see Silberstein, Striegel-Moore, Timko & Rodin, 1996, cited by Cash & Deagle, 1997). Cultural forces influence body image development in gender-contingent ways, such that women in western society possess more dysfunctional body image attitudes than men (Cash, Ancis, & Strachan, 1997).

Historically, many researchers have argued that cultural norms and expectations encourage girls and women to be attentive to and psychologically invested in their physical appearance, which can undermine their well being and contribute to eating dysregulation, depression, and other psychological difficulties (Striegel-Moore, 1985, Cash & Pruzinsky, 1990, Wolf, 1991, Fallon et al., 1994, Rodin, Silberstein, Rothblum,

1994, Gilbert & Thompson, 1996, & Thompson, 1996, cited by Cash & Deagle, 1997). In western societies, women's bodies are the locus of both increasing rates of obesity and body dissatisfaction as has been mentioned across this introduction. An alternative explanation is that they are the products of unfavorable sociocultural environments in the areas of food and weight. Both body dissatisfaction and excess weight can seriously impact women's physical and emotional health. The strong cultural value placed on thinness, especially for women, unfortunately may take precedence over health (Paquette & Raine, 2004).

Twenty years ago, body image disturbance was identified as a "normative discontent" among women from western countries (Striegel-Moore, Silberstein, & Rodin, 1986, cited by Thompson, 1999) who felt pressured to achieve the slender body ideal as mentioned before. More recently, men have begun to feel pressure to control their size and shape, though for the men it appears to be the emphasis on a large and muscular physique rather than extreme thinness (Thompson et al., 1999, Thompson & Stice, 2001, Phares, Steinberg, & Thompson, 2004, cited by Grabe & Hyde, 2006). Though statistics show that about 10% of men in the U.S. suffer from eating disorders (anorexia and bulimia) a growing body of evidence suggests that men may be especially vulnerable to muscle dysmorphia, a condition in which one obsesses about lacking muscle definition and mass, even with a muscular body (Cohane & Pope, 2001; Boroughs & Thompson, 2002; Dibiase & Hejelle, 1968, Lerner & Korn, 1972, Tucker, 1982, cited by Cafri & Thompson, 2004; Falkner et al., 2001, cited by Ricciardelli & McCabe, 2004; Jones, Vigfusdottir, & Lee, 2004; Hausenblas and Fallon, 2006; Feingold and Mazella, 1998, cited by Grabe & Hyde, 2006; Silberstein, Mishkind, Striegel-Moore, Timko, & Rodin, 1989, cited by Striegel-

Moore & Bulik, 2007; Frederick et al., 2007; Pope, Gruber, Choi, Olivadia & Phillips, 1997, Olicardia, Pope, & Hudson, in press). This specific disorder in males is associated with impaired self-esteem, symptoms of mood, anxiety, and eating disorders; individuals may refuse to allow their bodies to be seen in public settings, they may relinquish important social, and recreational, or occupational activities to work out compulsively at the gym and generally have a high prevalence of anabolic steroid abuse and an unhealthy preoccupation with weightlifting (Cohane & Pope, 2001).

It has been proposed in the literature, that diagnosing eating disorders in males is difficult due to the fact that it is believed that they are less likely to use extreme weight loss methods and many of the extreme binge eating patterns that are seen as abnormal or inappropriate in women. Additionally, males have been characterized by underreporting any symptomatology, which has been characterized by women (Carlat & Camargo, 1991; Carlat et al., 1997, cited by Ricciardelli & McCabe, 2004).

Research on body image in males is currently in its initial phase due to the fact that this is a newer issue that used to belong only to women. Nowadays it is know that there is an increased attention on muscle size, body shape, and being fit. Additional research would be interesting if it addressed how external factors such as cultural roles and female perception of masculine body ideals occur in diverse ethnic groups, due to the fact that the sociocultural models posits that there are external social factors that affect how people are perceiving themselves (Gleaver et al., 2000; Grabe & Hyde, 2006; Striegel-Moore, & Bulik, 2007).

Therefore, the third hypothesis for the present study predicted an interaction between country and gender, where American female student would report higher levels of

body dissatisfaction, followed by Colombian female students and finally males from both countries. Body image dissatisfaction was obtained with different measures that were explained in the Methods section of this document.

*Overview of the current study*

This study intended to investigate attitudes towards body size/shape and physical appearance among Colombian and American college students. This investigation started as an idea of researching an aspect viewed as pertinent in the Colombian population that could bring value to the discipline of psychology from Colombia and the U.S. Attitudes towards body size/shape and physical appearance are aspects that have been increasingly evident in the Colombian population by several factors. Some of these factors include increasing rates of disturbed eating and eating disorders specially in adolescents and young female adults, increasing of plastic surgeries in mid and high socio economic classes and an increasing level of importance given by media to invest time and money in Colombian's bodies both for males and females (Uribe, 2006; Gempeler, 2007). Increasing behaviors such as attending gymnasiums have been observed to be more generalized to the population it has become very popular especially in the big cities. Being fit, being in fashion and looking thin are aspects that permeate the values of Colombian females and males (Ochoa Hoyos, 2007).

With that idea in mind and with support from the Department of Psychology of a University from Bogota, Colombia, the administration of a compilation of scales in a questionnaire designed especially for this study was possible (refer to methods section). The variables measured in this study were Gender, Country of origin, Body Mass Index, Body Image Dissatisfaction, Thin Ideal, Sociocultural pressure to be thin, appearance,

health, and fitness attitudes and orientation, overweight preoccupation, and body areas satisfaction.

*Hypotheses*

Hypotheses of this study included (1) an interaction between country and gender, when predicting thin ideal internalization such that women from the US will present higher levels of thin ideal internalization, followed by Colombian females and then by males from both countries; (2) an interaction between country and gender, when predicting socio cultural pressure to be thin such that females would report higher perception of socio cultural pressure to be thin compared to males, followed by Colombian females and males from both countries; (3) an interaction between country and gender, where American female student would report higher levels of body dissatisfaction, followed by Colombian female students and finally males from both countries.

# CHAPTER II

## METHODS

*Participants*

Participants were 331 women and141 males from Colombia and 131 females and 77 males from the United States, a combined total of 462 women and 218 men. The participants were recruited from Psychology undergraduate courses from a University at Bogota, Colombia, during the summer of 2008, and at Texas State University during the fall semester of 2008. Any participant who had participated in similar previous research experiments was eliminated from the study prior to examination. Colombian classes were composed of approximately 18 students per class. Classes that were assessed varied from introductory courses to elective classes from the Psychology Department. In Colombia there was no incentive presented; students participated on a voluntary basis. The incentive for the American students was an extra credit in a midterm exam with alternative ways of getting credit, which was coordinated previously with the professor of the introductory course of approximately 250 students.

The mean age of the Colombian and the American female participants was 20.31 and 20.76 years, respectively. The mean age of Colombian and American males was 20.91 and 21.16 years, respectively. It was emphasized in both samples that participation was voluntary and individuals who chose not to participate would not suffer any consequences. Confidentiality was maintained among all participants and upon

conclusion of the study each participant was given the opportunity to receive a brief summary of the results of the proposed investigation.

*Materials*

The questionnaire designed for this study was composed of 104 items. These items included demographic open-ended and multiple selection questions, and four scales presented in the following order: EDI-2 subscale Body Image Dissatisfaction, thin ideal scale, sociocultural pressure to be thin, and MBSRQ. All of them had 5-option Likert scale type of response. These items were arranged in the same order for the English and Spanish versions of the questionnaire. The Spanish questionnaire was constructed using back-translation techniques, which included translating the English questionnaire to Spanish, by the author of this project and then asking a native Spanish speaking graduate student to translate back from Spanish to English. Discussion of the translation of the items that had problems was made to obtain the final version of the questionnaire.

*Demographic items*. Seven items included open-ended and multiple choice questions measuring age, gender, annual family income, academic standing, ethnicity, educational level of parents and self-identified type of culture (individualistic vs. collectivistic). This last item did not show any relevance due to the fact that participants of both countries selected their type of culture either as individualistic or collectivistic regardless of the country of origin (Appendix A).

*Global subjective body image dissatisfaction*. Body image dissatisfaction was measured with different subscales, the EDI-2 – Body Image Dissatisfaction subscale, and the Multidimensional Body Self Relations Questionnaire as suggested by Dr. Eric Stice (email communication April 2008).

The first instrument for measuring body image dissatisfaction was the Body Dissatisfaction Subscale from the EDI-2 (Garner, 1991, cited by Altabe, 1996). This instrument had nine items with a Likert-type response scale of five options ranging from never to always. Items such as "I think my stomach is too big" or "I think my buttocks are to large" were included. The internal consistency – Cronbach's alpha for normal controls in the U.S., is 0.91 (Altabe, 1996). The EDI-2 has been validated for the Colombian population by Berrio, Escamilla, Sanabria y Garcia, 1997, cited by Norena, Rojas & Novoa, 2006. Cronbach's alpha for normal controls in Colombia, were found to be .80 with a level of confidence of 95.00 % (In the current study the internal consistency had a Cronbach alpha of .84 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .81 with a level of confidence of 90.00% for the Colombian sample) (Appendix B).

The second instrument used to assess body image dissatisfaction was the Multidimensional Body-Self Relations Questionnaire (MBSRQ), which is a 69-item self-report inventory for assessing various attitudes related to body image. It has a 5-point lykert response scale: (1) Appearance evaluation subscale is composed of seven items with a 5-point response scale ranging from definitely disagree to definitely agree. This subscale measured feelings of physical attractiveness or unattractiveness, satisfaction, or dissatisfaction with one's looks (e.g., "I like my looks the way they are"). It has an internal consistency of .88 for males and .88 for females. (In the current study the internal consistency had a Cronbach alpha of .88 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .86 with a level of confidence of 95.00% for the Colombian sample). (2) Appearance orientation was a 12-item subscale, with a 5-

point likert response scale ranging from definitely disagree to definitely agree. It measured the extent of investment in one's appearance. An example item is: "Before going out in public, I always notice how I look". It has an internal consistency of .88 for males and .85 for females. (In the current study the internal consistency had a Cronbach alpha of .85 with a level of confidence of 95.00 % and a Cronbach alpha of .85 with a level of confidence of 95.00% for the Colombian sample). (3) Fitness evaluation was a 3-item subscale with a of a 5-point lykert response scale ranging from definitely disagree to definitely agree. This subscale measured feelings of being physically fit or unfit (e.g., "I easily learn physical skills"). (In the current study the internal consistency had a Cronbach alpha of .77 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .69 with a level of confidence of 95.00% for the Colombian sample). (4) Fitness orientation was a 13-item subscale, with a 5-point lykert response scale ranging from definitely disagree to definitely agree. This subscale measured the extent of investment in being physically fit or athletically competent (e.g., "It is important that I have superior physical strength" and "I would pass most physical-fitness tests"). (In the current study the internal consistency had a Cronbach alpha of .90 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .85 with a level of confidence of 95.00% for the Colombian sample). (5) Health evaluation was composed by a 6-item subscale with a 5-point lykert scale ranging from definitely disagree to definitely agree. This subscale measured feelings of physical health and/or the freedom from physical illness (e.g., "I am in control of my health"). (In the current study the internal consistency had a Cronbach alpha of .76 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .66 with a level of confidence of

95.00% for the Colombian sample). (6) Health orientation is a 8-item subscale with a 5-point lykert response scale ranging from definitely disagree to definitely agree. This subscale measured the extent of investment in a physically healthy lifestyle (e.g.,"I know a lot about things that affect my physical health" and "I have deliberately developed a healthy lifestyle"). (In the current study the internal consistency had a Cronbach alpha of .79 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .57 with a level of confidence of 95.00 % for the Colombian sample). (7) The illness orientation subscale had 5-items with a 5-point lykert response scale also ranging from definitely disagree to definitely agree. This subscale measured the extent of reactivity to being or becoming ill included (e.g., "If I am sick, I don't pay much attention to my symptoms"); (Cash, 2000; Cash & Pruzinsky, 2002; Cafri & Thompson, 2004; Raich, 2004) (In the current study the internal consistency had a Cronbach alpha of .73 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .69 with a level of confidence of 95.00 % for the Colombian sample). (8) Body areas satisfaction subscale is a 9-item subscale with a 5-point lykert response scale ranging from very dissatisfied to very satisfied. This subscale was more specific to aspects of one's appearance (e.g., "face (facial features, complexion), upper torso (chest or breasts, shoulders, arms)". It has an internal consistency of .77 for males and .73 for females. (In the current study the internal consistency had a Cronbach alpha of .83 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .79 with a level of confidence of 95.00 % for the Colombian sample). (9) The overweight preoccupation subscale was composed of 4 items presented in 5-point lykert scales ranging from definitely disagree to definitely agree for the first two items, and never to very often for

the latter two items. This subscale measured a construct reflecting fat anxiety, weight vigilance, dieting, and eating restraint. It included the item: "I have tried to lose weight by fasting or going on crash diets". It has an internal consistency of .73 for males and .76 for females. (In the current study the internal consistency had a Cronbach alpha of .75 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .75 with a level of confidence of 95.00 % for the Colombian sample). (10) The self-classified weight subscale was composed of 2 items ranging in a 5-point lykert scale from very underweight to somewhat overweight. This subscale reflected how one perceives and labels one's weight from very underweight to very overweight (e.g., I think I am:" and "From looking at me, most other people would think I am"). It has an internal consistency of .70 for males and .89 for females (Cash, 2000; Cash & Pruzinsky, 2002; Cafri & Thompson, 2004; Raich, 2004) (In the current study the internal consistency had a Cronbach alpha of .72 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .86 with a level of confidence of 95.00 % for the Colombian sample). (Appendix C).

*Thin ideal internalization.* The variable thin ideal was assessed using the Ideal Body Stereotype Scale-Revised (IBIS-R; Stice, 2001; Stice & Agras, 1998; Stice & Bearman, 2001, cited by Stice, 2002). This scale consisted of 6 items with a 5-point lykert response scale ranging from strongly disagree to strongly agree (e.g., "Slender women are more attractive" and "Women with toned (lean) bodies are more attractive"). It has a robust internal reliability ($\alpha = .86$) (Stice, 2002) (In the current study the internal consistency had a Cronbach alpha of .66 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .76 with a level of confidence of 95.00 % for the Colombian sample). (Appendix D).

*Sociocultural pressure*. Sociocultural pressure to be thin was evaluated using the Socio-Cultural Pressure Scale (Stice, 2002). This scale is composed of 10 items presented in a 5-point lykert response scale ranging from none to a lot. This scale assessed how much pressure participants feel from their family and friends to be thin (e.g., "I've felt pressure from my friend to lose weight" and "I've felt pressure from the media (e.g., TV, magazines) to lose weight"). The cronbach's coefficient of internal consistency is .88, and the test-retest reliability is $r = .93$. (Stice, 2002) (In the current study the internal consistency had a Cronbach alpha of .85 with a level of confidence of 95.00 % for the American sample and a Cronbach alpha of .86 with a level of confidence of 95.00 % for the Colombian sample). (Appendix E).

*Design and Procedures*

This study was designed as quasi-experimental to compare gender groups from the U.S. and Colombia on assessed variables. The study was first approved by the Institutional Review Board (IRB) from a University at Central Texas for both English and Spanish versions of the Consent Form and Questionnaire and approved by the Psychology Department from a University at Bogota, Colombia. After the IRB and Colombian university' approval, the author of this project traveled to Bogota to start the collection of data. The administration of the questionnaires for the Colombian sample was done in the month of August of 2008. Approximately 15-20 students were administered the questionnaires during each session. Before the class started, with the authorization of the instructor, instructions about participating were given along with the consent form in Spanish. After they signed it, a copy of the questionnaire was given to the students. Once they gave back the questionnaire, measurements of their body mass

index took place in another room. Body weight and shape was measured with a metric tape and a scale used for the whole study. BMI was calculated by dividing the participant's weight (Kg) by their height ($m^2$). After the weight and height were taken, the participants were debriefed and provided with the researcher's contact information. Data collection in Colombia took three weeks to complete. In the U.S., research participants were recruited from the course "Psychology of Human Sexuality" one introductory psychology course at Texas State and received extra credit towards their final point total (October 2008) for their participation. Research participants in the U.S. sample received the same instructions as those given to the Colombian sample. Once they finished the questionnaire the BMI measures were taken in a separate room in pounds and centimeters. After their BMI measures were taken, a sheet of paper containing debrief information was given to each student, exactly as the Spanish version. The collection of data took approximately two and a half hours for the American sample. After the collection of data, analysis of data was done in the fall semester of 2008 and spring semester 2009.

# CHAPTER III

## RESULTS

### *Preliminary Analysis*

*Factor Analysis.* A principal components factor analysis using varimax rotation was computed on the variables (body areas satisfaction, thin ideals internalization, appearance evaluation, appearance orientation, fitness evaluation, fitness orientation, health evaluation, health orientation, illness orientation, overweight preoccupation, self classified weight and sociocultural pressure), in an effort to reduce the number of dependent variables and Type-I error.

In the factor analysis it was found that there were four main factors contributing for the variance in these variables (See Table 1). Due to the fact that these variables were the first time they were used in the Colombian population, reliability analyses were also done.

Table 1. Factor Analysis of EDI, thin ideals, Appearance Evaluation, appearance orientation, fitness evaluation, fitness orientation, health evaluation, health orientation, illness orientation, body areas satisfaction, overweight preoccupation, self-classified weight and sociocultural pressure.

| | Factors | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| EDI | **.844** | .104 | -.021 | -.056 |
| Thin ideals | -.153 | .104 | .160 | -.078 |
| Appearance Ev. | **.803** | .174 | .245 | -.074 |
| Appearance Or | -.222 | -.018 | **.657** | .023 |
| Fitness Ev. | .042 | **.900** | -.013 | .005 |
| Fitness Or | .058 | **.867** | .152 | .010 |
| Health Ev. | .397 | **.525** | .010 | -.096 |
| Health Or. | .190 | .402 | **.533** | -.044 |
| Illness Or. | .273 | .026 | **.665** | .013 |
| Body Areas Sat. | **.760** | .157 | .139 | -.038 |
| Over –weight Pr. | -.703 | -.038 | **.592** | .082 |
| Self classified W. | **.475** | .022 | -.162 | -.099 |
| Sociocultural Pr. | -.186 | -.024 | .001 | **.981** |

Factor 1 explained 26.6 % of the variance. This factor was named Body Image because the variables included were the EDI, appearance evaluation, body areas satisfaction, and self-classified weight. Factor 2 explained 15.8 % of the variance and included the variables fitness evaluation, fitness orientation, and health evaluation. This factor was named Fitness. Factor 3 was composed by appearance orientation, illness

orientation, health orientation, and overweight preoccupation variables and it was named Self-Value, explained 7.9% of the variance. Factor 4 was only composed by the variable sociocultural pressure, which gave it its name, explained 9.6% of the variance (See Table 2).

Table 2. Total Variance explained for the Factor Analysis.

| Rescaled | Component | % of Variance | Cumulative % |
|---|---|---|---|
| Body Image | 1 | 26.566 | 26.566 |
| Fitness | 2 | 15.824 | 42.390 |
| Sociocultural Pressure | 4 | 9 594 | 50.288 |
| Self-Value | 3 | 7.897 | 59.881 |

For the purpose of this study the factors body image and sociocultural pressure were of interest so the other variables will not be discussed.

*Reliability Analyses*

In Table 3 are reported the Cronbach's alpha, means and standard deviations for all the composite variables of Factors 1, 2 and 3 (See Table 3).

Table 3. Reliability Analysis and Statistics for Factor 1 – Body Image

| **Factors** | **Cronbach's Alpha** | **Mean** | **Std. Deviation** | **N** |
|---|---|---|---|---|
| **Body Image** | .805 | | | |
| Eating Disorders Inv. | | 2.6264 | .74518 | 662 |
| Appearance Ev. | | 3.5695 | .77195 | 662 |
| Body Areas Sat. | | 3 5697 | .65276 | 662 |
| Self Classified weight | | 4.3134 | .59969 | 662 |

*Statistical Analysis*

For the present study different statistical analysis were done to determine whether the sample provided enough evidence to support any significant interactions among gender and country. MANOVAs were done for each variable that represented the factors found in the preliminary analysis.

*MANOVAs*

*Hypothesis 1. There would be an interaction between sex and thin ideals internalization. Such that women from the US will present higher levels of thin ideals internalization, followed by Colombian females and then by males from both countries.*

Contrary to what it was expected in the first hypothesis, examination of the differences in thin ideals internalization reported no significant effects in the thin ideals scale for gender, country or their interaction ($F < 1$) (See Table 4).

Table 4. Thin ideals Internalization analysis.

| Thin ideals | F | Sig. |
|---|---|---|
| Gender | 2.58 | .108 |
| Country | 1.54 | .215 |
| Gender * Country | 1.19 | .275 |

*Hypothesis 2. An interaction such that females would report higher perception of socio cultural pressure to be thin compared to males; however, females from the United States will report higher levels of socio cultural pressure compared to both Colombian females and males from both countries.*

There were no significant interaction effects found between gender and country in perceived sociocultural pressure ($F = 1, 671) = .89$ $p. < .34$). In this case, females from both countries perceived a higher sociocutural pressure ($M$=2.47, $SD$=.05) compared to males ($M$=2.35, $SD$=.07). Specifically, females from the US ($M$=2.55, $SD$=.09) reported higher scores than females from Colombia ($M$=2.4, $SD$=.06). Males from Colombia ($M$=2.36, $SD$=.08) reported higher scores compared to American males ($M$=2.33, $SD$=.12) (See Table 5).

Table 5. Sociocultural pressure to be thin analysis.

| Sociocultural pressure | F | Sig. |
|---|---|---|
| Gender | 1.88 | .171 |
| Country | .354 | .552 |
| Gender * Country | .892 | .345 |

Results from females and males from Colombia and the United States are presented in Table 6.

Table 6. Statistical analysis for females and males in Sociocultural pressure.

| | Means | Means |
|---|---|---|
| | Females | Males |
| U.S. | 2 47 | 1.71 |
| Colombia | 2.21 | 1.74 |

*Hypothesis 3. American female student would report higher levels of body dissatisfaction, followed by Colombian female students and finally males from both countries.*

Analysis of Factor 1 - Body Image included body areas satisfaction / dissatisfaction, appearance evaluation, and self-classified weight, variables that were part of this factor. As shown in the preliminary factor analysis, the MANOVA performed on Factor 1 – Body Image scores indicated significant main effects of Gender, $F$ (1,654)=35.46 $p$<.001 and Country, $F$ (1,654)=25.29 $p$<.001. However, no significant effects were found for interaction between gender and country for the three factors (See Table 5).

The results for the Manova in Factor 1 – Body Image showed that women from Colombia have higher body image satisfaction ($M$=10.83, $SD$=1.95) compared to females from the United States ($M$=9.80, $SD$=2.15). Males from Colombia reported higher body image satisfaction ($M$=11.66, $SD$=1.45) compared to males from the U.S. ($M$=10.99, $SD$=1.93) (Figure 1 and 2).

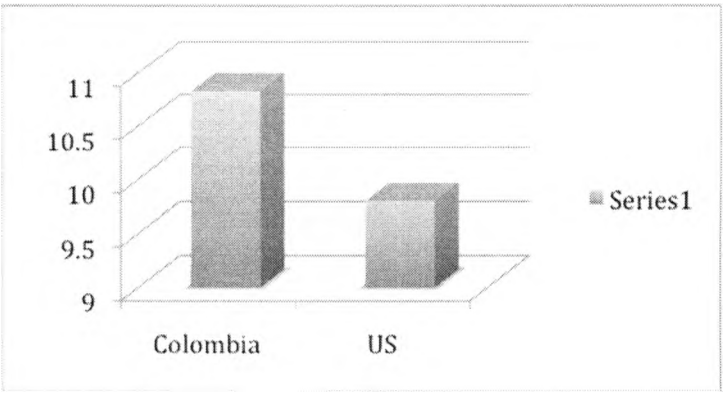


Figure 1. Body Image satisfaction for Factor 1 – Body Image for females from both countries.

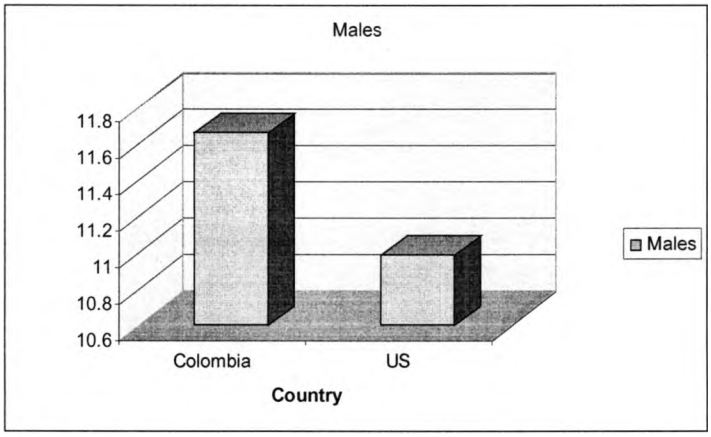


Figure 2. Body Image satisfaction for Factor 1 – Body Image for males from both countries.

Statistical analysis for males and females in body image are presented in Table 7.

Table 7. Body Image analysis.

| Body Image | F | Sig. |
|---|---|---|
| Gender | 35.46 | .000 |
| Country | 25.29 | .000 |
| Gender * Country | 1.11 | .293 |

# CHAPTER IV

## DISCUSSION

This research was the first multi cultural study of body image that explored the relationship between female and male college students, as well as country of origin (Colombia or the United States). The study provided significant data to expand the understanding of how culture and gender differences affect the perception of the bodies of college students from these countries. As it has been reported in the literature, determining whether there are similarities or differences in body dissatisfaction among subpopulations of females and males is very important. This study provided some initial ideas that will help design interventions that can help prevent or treat secondary problems of a disturbed body image in these populations, especially in Colombia (Dounchis, Hayden, & Wilfley, 2001, Smolak & Striegel-Moore, 2001, cited by Grabe & Hyde, 2006). The findings of the relationships in this study will be discussed in turn.

The first hypothesis predicted an interaction between country and gender, such that women from the US will present higher levels of thin ideals internalization, followed by female Colombians and then by male from both countries. Contrary to what was expected there was no difference in thin ideals internalization reported for gender, or country of origin, or their interaction However, even though the analyses were found to not be significant, interestingly, the similarity within the scores showed that there are ideals of thinness already internalized in these samples. The statistical analyses done in

the four groups (females and males from United States and Colombia) show that the means in these groups range from 3.58 to 3.66. (See Table 5 in the Results section). These scores are more inclined towards a high level of thin ideals internalization. Therefore, for females from the U.S., thin ideals is a normative standard already acquired. What was not expected was that Colombian females are showing to be more inclined into that thin ideals, and report having greater sensitivity similarly to American females. Surprisingly, males from both countries reported even higher levels of thin ideals that reach almost similar levels of American females. Therefore, the importance of thin bodies in males is a trend that is starting to show in the current literature. It has been reported that thin ideals in American society have been the norm for at least the last thirty years, which seems to agree with the findings from this study. On the other hand, research in Colombia about thin ideals is scarce which gave the parameters to hypothesize a lower thin ideals in the first place.

Exposure to American media, which has been increasing especially in Colombia during the last decade, might be a factor that has affected how internalized the thin ideals of women and now for males is present in the population. Experts have emphasized that globalization has carried the thin female ideal as generalized social norms to ever larger numbers of cultures and populations for the last years and that, as a consequence, body image disturbances and also eating disorders should be expected to increase worldwide (Catina & Joya, 2001, Gordon 2001, cited by Striegel-Moore & Bulik, 2007). Currently, accelerated globalization offers the perfect opportunity to study the impact of changing body ideals on eating disorders as well as the potential to elucidate mechanisms whereby such an effect would occur, which is showing in the current study. Striegel-Moore and

Bulik, (2007), also reported that the evidence showed that we live in a culture that values thinness and that exposure or social pressure to conform to this norm also contributes to body image concerns. This leads us to the discussion of the second hypothesis (Striegel-Moore & Bulik, 2007).

In support of the second hypothesis an interaction between country and gender was not predicted when females from the United States reported higher levels of socio cultural pressure compared to both Colombian females and males from both countries. Slight differences in males were also found, which were not predicted in this hypothesis. Males from Colombia reported higher sociocultural pressure to be thin than males from the U.S.

As it has been presented in the literature review, ethnic groups may have reached parity in terms of eating disturbances because sociocultural pressures to be thin are so widespread that they are now reaching all ethnic groups (Shaw, Ramirez, Trost, Randall & Stice, 2004). The sociocultural theory premise is that social pressures (e.g., media, friends, family) are the catalyst for people's desire to conform to unrealistic physique standards, which are difficult to achieve without dieting, exercise, or both (Thompson et al., 1999, cited by Hausenblas & Fallon, 2006). Moreover, globalization and exposure to media from the U.S. help explain how Colombian women and males perceive pressures from society to have a specific body characterized by a thin physique.

The fact that Colombian males perceived more pressure than American males is an aspect that needs to be considered in future research, where males should become a "must" when studying body image dissatisfaction. Unfortunately, there are no studies or statistics in the Colombian literature to compare these findings to what other researchers

have found in the United States. However, trends in Colombia and Latin America have shown that during the past decade males have become more conscious about their bodies, and this special attention on their selves have not threatened their sexual identities. Historically, males were taught to identify their sexuality based on characteristics specifically of males, where showing emotions were characteristics only permitted in females. Having long hair, dieting and exercising to acquire a fit figure, were not culturally permitted. Since the 80s, media, fashion and influences from other Western societies have led to increase attention to beauty, style, fitness and also plastic surgeries in men that explain the gender differences found in the study (Colombian Society of Plastic Surgery, phone communication with Dr. Lizet Barreto, June 2009).

In support of the third hypothesis, American female students reported higher levels of body dissatisfaction, followed by Colombian female students and finally males from both countries as expected. As several researchers (Attie & Brooks-Gunn, 1989; Streigel-Moore, Silberstein, Frensch, Rodin, 1989, Abood & Chandler, 1997; cited by Rutt & Coleman, 2001) have suggested, dissatisfaction is typically presented more in women who have a poor body image than men (Shirao, Okamoto, Okada, Okamoto & Yamawaki, 2005). Women from western societies have been reinforced to have an acceptable body image according to societal norms, which include being thin, and feminine. At the same time, it has been evident that the effects of media such as TV and magazines from the United States have a great influence in the media that females and males are watching now in Latin American countries like Colombia. In a study done in Mexico, researchers identified that eating less and dieting was a sign of femininity and

was valued as a social attraction (Lora-Cortez & Saucedo-Molina, 2006; Ochoa-Hoyos, 2007).

However, there was an interaction between males from the U.S. and Colombia that was not predicted where males from Colombia were found more satisfied with their body image than American males. Additionally, the study found that males have started to perceive the pressure of having a body similar to beauty standards too, which it has also been reported in the literature as well. Males from the United States have traditionally been exposed to a pressure to be fit. Specifically, young males from college level have been always characterized as being popular when they perform in sports, maintain a fit body, and get the "pretty and thin "girl. Differently, in Colombian society women and society in general do not criticize male's bodies as much. Additionally, the physic is not a specific condition for women to choose as a partner.

Males have started to worry about their bodies, how they look specifically worrying about being manly and muscular enough. In the literature it was repeatedly found that body image dissatisfaction is a growing preoccupation amongst women and now males in various countries (Cohane & Pope, 2001; Boroughs & Thompson, 2002; Dibiase & Hejelle, 1968, Lerner & Korn, 1972, & Tucker, 1982, cited by Cafri & Thompson, 2004; Falkner et al., 2001, cited by Ricciardelli & McCabe, 2004; Jones, Vigfusdottir, & Lee, 2004; Feingold and Mazella, 1998, cited by Grabe & Hyde, 2006; Hausenblas and Fallon, 2006; Silberstein, Mishkind, Striegel-Moore, Timko, & Rodin, 1989, cited by Striegel-Moore & Bulik, 2007; Pope, Gruber, Choi, Olivadia & Phillips, 1997, Olicardia, Pope, & Hudson, in press).

As found in the literature, analyzing the perception between males and females about their ideal body to the actual body size and shape has recently received more attention. Jones, Vigfusdottir and Lee (2004), hypothesized that girls as compared to boys would indicate higher levels of involvement in the culture of appearance (as indicated by favorite magazines, appearance conversations, and peer criticism), higher internalization of appearance ideals, and greater body dissatisfaction. In the case of the males who would report greater internalization evaluations, they would also experience greater body dissatisfaction. It was found that internalization mediated the relationship between appearance conversations with friends and body dissatisfaction for males and females. Internalization, peer appearance criticism and BMI made direct contributions to body dissatisfaction, gender being a mediator in the strength of the relationships (Jones, Vigfusdottir, & Lee, 2004). Additional explanations of how females are more aware of their bodies, and therefore more dissatisfied, refer to historical pressure for this gender to be aware of their posture, their diet, their clothes much more than males, and that in the Colombian culture has been present and marks societal norms for them (Uribe, 2006).

While all the hypotheses were not supported, some important implications do exist. Gender and country differences between Colombia and the U.S. were found related in how college students perceive their body image. The findings of the current study have far-reaching implications for the theoretical understanding of cultural differences among young adults regarding their perception of their own body within their society; how body image dissatisfaction is a broader concept that has implication on the health of this population; and how gender is still an important factor in the understanding of risks to develop eating disorders. In addition, it presents new findings on the interplay between

gender and attitudes towards appearance, fitness and health. Theory has mainly focused on women and how they perceive themselves, but including males into the equation seems a more appropriate approach now that the presence of important factors for this population, have been identified.

The current study highlights the importance of examining body image attitudes in cultures with non-disordered eating populations. Such emphasis may provide greater understanding of the precursors of disordered eating which translates into efforts of preventing such disorders in these populations. The research on body image has used varied methods of measuring and manipulating gender, and measuring attitudes, cognitions and emotions related to the own body. As previously reviewed, these differences may contribute to the inconsistency seen in research. While the current study replicated previous methods of measuring body image dissatisfaction, a new way of approaching different ethnic groups was developed and may have implications for future study. Using multiple instruments helped acquire multiple data that with the help of statistical analysis was able to identify differences and similarities in the population of the samples. Although most of the measures had never been taken before in Colombia, double translation helped to bring the questionnaires into Colombia and get a closer look of how young adults from a university perceive their bodies. The use of better and validated instruments to Colombian and other Latin American countries that base their analysis on American developed instruments' must continue to be a priority for governments and institutions due to the fact that valid data can give more accurate information that can help develop prevention and treatment programs, specially for these populations.

There were limitations to the current study. The study focused on college students and their perceptions about their bodies. As a result, the generalizability of the study is limited to these groups of participants. Additionally, the characteristics of both Colombia and American samples are reduced to the cities where the study took place. Bogota is a capital city with more cultural diversity compared to other cities in Colombia. The university where the research took place represents a mid-high to high -class socio economic status. San Marcos, Texas is mainly a college town of central U.S. Because this is the first study to analyze body image differences between these two countries, the lack of literature to compare the results made it difficult to obtain stronger explanations. Future directions would need to include research with more diverse population.

Conclusions from the study include that body image dissatisfaction is an increasing phenomenon that sometimes is underreported and viewed as a silent epidemic, (Thompson, & Heinberg, 1999). As demonstrated in this study, it is happening for both females and males. The current study contributes to the body of research on body image and eating disorders especially for men. The study extends research on the relationship of gender and culture in males – often neglected in the area of eating disorders. Future research should examine this interaction further. Findings reiterate the relationship between being a female and worrying about their bodies, looking for an esthetic ideal, and following norms from a specific western society. It is suggested that studies such as this one keeps bringing attention to other professionals due to the higher rates of obesity, body image dissatisfaction and increase problematic eating behaviors such as dieting, restricting, excessive hours working out, and moreover, higher rates of plastic surgery in the Colombian and American population. This type of studies help professionals and

specialists to understand the causes and factors that lead people to develop body image dissatisfaction and disturbed eating, and therefore use appropriate tools to prevent and treat them.

## APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

Please provide the following information:

1. Age: ___
2. Gender:

   Female O  Male O
3. Total annual family income:

   1) Under 10.000

   2) 10.000 to 20.000

   3) 20.000 to 30.000

   4) 30.000 to 40.000

   5) 40.000 to 50.000

   6) Over 50.000
4. Educational Level (in years): ____
5. Ethnicity: _____
6. Please select the type of culture that you think describes the society you live in.

   _____ Individualistic culture: individuals focus on personal, internal attributes –individual ability, intelligence, personality traits, goals, or preferences – expressing them in public and verifying and confirming them in private through social comparison; Self is a bounded entity, clearly separated from others.

_____ Collectivistic culture: individuals are socialized to adjust themselves to an attendant relationship or a group to which they belong, to be sympathetic, to occupy and play their assigned roles, and to engage in appropriate actions.

## APPENDIX B

Eating Disorders Inventory – Body Dissatisfaction Subscale

**BODY DISSATISFACTION: Subscale Item, Item-Total Correlations, Reliability Coefficients for AN and FC groups.**

| | | | |
|---|---|---|---|
| 2. | I think that my stomach is too big. | .51 | .51 |
| 9. | I think that my thighs are too large. | .69 | .68 |
| 12.* | I think that my stomach is just the right size. | .66 | .58 |
| 19.* | I feel satisfied with the shape of my body. | .50 | .65 |
| 31.* | I like the shape of my buttocks. | .69 | .68 |
| 45. | I think my hips are too big. | .78 | .75 |
| 55.* | I think that my thighs are just the right size. | .73 | .78 |
| 59. | I think by buttocks are too large. | .83 | .73 |
| 62.* | I think that my hips are just the right size. | .70 | .78 |
| Reliability Coefficients (Standardized Cronbach's Alphas) AN=.90 FC=.91 | | | |

## APPENDIX C

The Multidimensional Body-Self Relations Questionnaire

### THE MBSRQ

*INSTRUCTIONS--PLEASE READ CAREFULLY*

The following pages contain a series of statements about how people might think, feel, or behave. You are asked to indicate the extent to which each statement pertains to you personally. Your answers to the items in the questionnaire are anonymous, so please do not write your name on any of the materials. In order to complete the questionnaire, read each statement carefully and decide how much it pertains to you personally. Using a scale like the one below, indicate your answer by entering it to the left of the number of the statement. There are no right or wrong answers. Just give the answer that is most accurate for you. Remember, your responses are confidential, so please be completely honest and answer all items.



**EXAMPLE:**

_____ I am usually in a good mood.

In the blank space, enter a **1** if you **definitely disagree** with the statement;
enter a **2** if you **mostly disagree**;
enter a **3** if you **neither agree nor disagree**;
enter a **4** if you **mostly agree**;
or enter a **5** if you **definitely agree** with the statement.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Definitely Disagree | Mostly disagree | Neither agree nor disagree | Mostly agree | Definitely agree |

_____ 1. Before going out in public, I always notice how I look.
_____ 2. I am careful to buy clothes that will make me look my best.
_____ 3. I would pass most physical-fitness tests.
_____ 4. It is important that I have superior physical strength.
_____ 5. My body is sexually appealing.
_____ 6. I am not involved in a regular exercise program.
_____ 7. I am in control of my health.
_____ 8. I know a lot about things that affect my physical health.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Definitely Disagree | Mostly disagree | Neither agree nor disagree | Mostly agree | Definitely agree |

_____ 9. I have deliberately developed a healthy lifestyle.
_____ 10. I constantly worry about being or becoming fat.
_____ 11. I like my looks just the way they are.
_____ 12. I check my appearance in a mirror whenever I can.
_____ 13. Before going out, I usually spend a lot of time getting ready.
_____ 14. My physical endurance is good.
_____ 15. Participating in sports is unimportant to me.
_____ 16. I do not actively do things to keep physically fit.
_____ 17. My health is a matter of unexpected ups and downs.
_____ 18. Good health is one of the most important things in my life.
_____ 19. I don't do anything that I know might threaten my health.
_____ 20. I am very conscious of even small changes in my weight.
_____ 21. Most people would consider me good-looking.
_____ 22. It is important that I always look good.
_____ 23. I use very few grooming products.
_____ 24. I easily learn physical skills.
_____ 25. Being physically fit is not a strong priority in my life.
_____ 26. I do things to increase my physical strength.
_____ 27. I am seldom physically ill.
_____ 28. I take my health for granted.
_____ 29. I often read books and magazines that pertain to health.
_____ 30. I like the way I look without my clothes on.
_____ 31. I am self-conscious if my grooming isn't right.
_____ 32. I usually wear whatever is handy without caring how it looks.
_____ 33. I do poorly in physical sports or games.
_____ 34. I seldom think about my athletic skills.
_____ 35. I work to improve my physical stamina.
_____ 36. From day to day, I never know how my body will feel.
_____ 37. If I am sick, I don't pay much attention to my symptoms.
_____ 38. I make no special effort to eat a balanced and nutritious diet.
_____ 39. I like the way my clothes fit me.
_____ 40. I don't care what people think about my appearance.
_____ 41. I take special care with my hair grooming.
_____ 42. I dislike my physique.
_____ 43. I don't care to improve my abilities in physical activities.
_____ 44. I try to be physically active.
_____ 45. I often feel vulnerable to sickness.
_____ 46. I pay close attention to my body for any signs of illness.
_____ 47. If I'm coming down with a cold or flu, I just ignore it and go on as usual.
_____ 48. I am physically unattractive.
_____ 49. I never think about my appearance.
_____ 50. I am always trying to improve my physical appearance.

_____ 51. I am very well coordinated.
_____ 52. I know a lot about physical fitness.
_____ 53. I play a sport regularly throughout the year.
_____ 54. I am a physically healthy person.
_____ 55. I am very aware of small changes in my physical health.
_____ 56. At the first sign of illness, I seek medical advice.
_____ 57. 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.**

_____ 58. I have tried to lose weight by fasting or going on crash diets.
1. Never
2. Rarely
3. Sometimes
4. Often
5. Very Often

_____ 59. I think I am:
1. Very Underweight
2. Somewhat Underweight
3. Normal Weight
4. Somewhat Overweight
5. Very Overweight

_____ 60. 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

61-69. Use this 1 to 5 scale to indicate how dissatisfied or satisfied you are with each of the following areas or aspects of your body:

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Very Dissatisfied | Mostly Dissatisfied | Neither satisfied nor dissatisfied | Mostly Satisfied | Very Satisfied |

_____ 61. Face (facial features, complexion)
_____ 62. Hair (color, thickness, texture)
_____ 63. Lower torso (buttocks, hips, thighs, legs)
_____ 64. Mid torso (waist, stomach)
_____ 65. Upper torso (chest or breasts, shoulders, arms)
_____ 66. Muscle tone
_____ 67. Weight
_____ 68. Height

_____ 69. Overall appearance
MBSRQ⌈ Thomas F. Cash, Ph.D.

## APPENDIX D

Ideal Body Stereotype Scale – Revised

| **How much do you agree with these statements:** | strongly disagree | disagree | neutral | agree | strongly agree |
|---|---|---|---|---|---|
| 1. Slender women are more attractive. . . . . | 1 | 2 | 3 | 4 | 5 |
| 2. Women who are in shape are more attractive. . . . . | 1 | 2 | 3 | 4 | 5 |
| 3. Tall women are more attractive . . . . . | 1 | 2 | 3 | 4 | 5 |
| 4. Women with toned (lean) bodies are more attractive. . | 1 | 2 | 3 | 4 | 5 |
| 5. Shapely women are more attractive . . . . . | 1 | 2 | 3 | 4 | 5 |
| 6. Women with long legs are more attractive. . . . . | 1 | 2 | 3 | 4 | 5 |

**Scoring:**

Circled responses should be averaged to form a scale score.

## APPENDIX E

Perceived Sociocultural Pressure Scale

**Please circle the response that best captures your own experience:** none some a lot

1. I've felt pressure from my friends to lose weight. . . . . .1 2 3 4 5
2. I've noticed a strong message from my friends to have a thin body. . . . . .1 2 3 4 5
3. I've felt pressure from my family to lose weight . . . . . .1 2 3 4 5
4. I've noticed a strong message from my family to have a thin body. . . . . .1 2 3 4 5
5. I've felt pressure from people I've dated to lose weight. . . . . .1 2 3 4 5
6. I've noticed a strong message from people I've dated to have a thin body. .1 2 3 4 5
7. I've felt pressure from the media (e.g., TV, magazines) to lose weight . . . .1 2 3 4 5
8. I've noticed a strong message from the media to have a thin body. . . . . .1 2 3 4 5
9. Family members tease me about my weight or body shape . . . . . .1 2 3 4 5
10. Kids at school tease me about my weight or body shape. . . . . .1 2 3 4 5

**Scoring:**

Circled responses should be averaged to form a scale score.

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