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Body Image Subtypes and Their Relation to Psychosocial Outcomes

Among Latina Adolescents

A Thesis submitted in partial satisfaction of the requirements for the degree Master of Arts

in Education

by

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March 2019

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January 2019

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Among Latina Adolescents

ABSTRACT

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Adolescents

by

Cecile Binmoeller

Research on body image among adolescent girls has seen a substantial increase

during the past two decades due to its direct connection to physical and mental health

problems. Unfortunately, the majority of these studies have been pathology-focused with

extensive research examining negative conceptualizations of body image. Moreover, there is

a dearth of research examining how adolescents from diverse cultural backgrounds

experience body image. This paper addresses these gaps in the literature by first identifying

distinct profiles of both positive and negative body image experiences among Latina

adolescents. The emergent body image profiles were then linked to various psychosocial

outcomes, including disordered eating, social engagement, and self-esteem. LCA results

showed preference for a two-class model that included a *Positive Attitude and Hoping to

Change* class and a *Negative Attitude and Hoping to Change* class. The *Negative Attitude

and Hoping to Change* class demonstrated generally poorer outcomes, as they reported

greater levels of disordered eating and lower functioning with regard to self-esteem and

social engagement.

Body Image Subtypes and Their Relation to Psychosocial Outcomes Among Latina

Adolescents

Research on body image among adolescent girls has seen a substantial increase

during the past two decades in the literatures of healthcare psychology and adolescent

development due to its direct connection to physical and mental health problems (e.g., Allen,

Byrne, McClean, & Davis, 2008; Kluck, 2010; Stice & Shaw, 2002). Unfortunately, the

majority of these studies have been pathology-focused with extensive research examining

negative conceptualizations of body image, such as body dissatisfaction, rather than body

appreciation (Frisen & Holmqvist, 2010; Wood-Barcalow, Tylka, & Augustus-Horvath,

2010). Although understanding the processes associated with a negative body image plays

an essential role in addressing the psychological and physical needs of youth, there remains

a substantial gap in research regarding the positive outcomes that might be related to body

appreciation.

Adolescents are particularly vulnerable to body dissatisfaction as they undergo

physical changes (Nishina, Ammon, Bellmore, & Graham, 2006), begin to explore their

identity (Markey, 2010), and prioritize social conformity and social status (Davison &

McCabe, 2006). Previous research has revealed the majority of adolescents experience body

dissatisfaction (Markey, 2010), which is associated with low self-esteem, social distress, and

disordered eating (Grabe et al., 2008; Markey, 2010; Menon & Harter, 2012; Schooler,

2008). These findings highlight the need for research to further investigate and ameliorate

these negative outcomes. Moreover, there is a lack of knowledge regarding how adolescents

from diverse cultural backgrounds experience body image, particularly among Latinas

(Franko et al., 2013; Schooler & Daniels, 2014). Yet, the stress of acculturation attributable

to navigating multiple cultures puts adolescent Latinas at increased risk of developing various negative psychosocial outcomes (Franko et al., 2013).

This paper addresses these gaps in scholarship by identifying distinct subgroups of both positive and negative body image experiences among Latina adolescents. The emergent body image subgroups were then linked to various psychosocial outcomes, including disordered eating, social engagement, and self-esteem. These findings have the potential to expand our knowledge of self-perceived body-related experiences among Latina adolescents and inform the development of interventions that address or prevent body image issues.

Body Image

Body image is a complex construct that involves body-related self-perceptions and self-concepts (Markey, 2010). More specifically, it includes an individual's thoughts, attitudes, and feelings about one's physical appearance (Fogelkvist, Parling, Kjellin, & Gustafsson, 2016). Because individuals experience ongoing physical changes across the lifespan, body image perceptions are not static and are instead understood to fluctuate (Markey, 2010). Body-related perceptions develop as a result of an interaction between one's personal self-image and multifaceted external factors, such as culture, media, and peers (Davison & McCabe, 2006; Markey, 2010). An individual's attitude toward his or her body can have both positive and negative features (Wood-Barcalow, Tylka, & Augustus-Horvath, 2010). Although both have been found to have a strong impact on psychosocial and physical outcomes, a large proportion of body image research has focused on its negative features, such as body dissatisfaction (Tiggemann, 2004; Wood-Barcalow, Tylka, & Augustus-Horvath, 2010).

Individuals who experience body dissatisfaction are described as feeling discontent with some aspect of their physical appearance (Fogelkvist et al., 2016). Research suggests body dissatisfaction typically emerges during childhood, around the age of seven, and continues into adulthood (Grabe, Ward, & Hyde, 2008; Schooler, 2008). Compared to males, females report a greater number of concerns and mental health issues related to their physical appearance (Davison & McCabe, 2006). Approximately 50% of females have been found to report body dissatisfaction (Grabe et al., 2008).

Less is known regarding the construct of positive body image, often referred to as body appreciation (Avalos, Tylka, & Wood-Barcalow, 2005; Frisen & Holmqvist, 2010; Wood-Barcalow, Tylka, & Augustus-Horvath, 2010). Avalos et al. (2005), found that four components encompass a positive image: respect for the body, favorable opinions of the body, body acceptance, and protecting the body by rejecting unrealistic ideal body images.

Body Image and Adolescent Girls

Body image plays a significant role in an adolescent's development as they experience both social-emotional and physical changes (Davison & McCabe, 2006; Markey, 2010; Nishina et al., 2006; Schooler, 2008). Adolescents have been found to prioritize social status and to value their identity as well as the evaluation of their peers (Davison & McCabe, 2006; Markey, 2010). Given these social pressures, they might feel a heightened awareness of their bodies and an increased desire to conform to both societal and peer expectations regarding physical appearances (Schooler & Daniels, 2014). In addition, during puberty, their bodies mature and increase in weight and size (Markey, 2010). Scholarship suggests this increase might make girls especially vulnerable to body dissatisfaction, as their bodies deviate from the externally-generated ideal of a slender body (Davison & McCabe, 2006;

Nishina et al., 2006). As many as 80% of high school girls have been found to struggle with a negative body image (Schooler, 2008). Furthermore, research findings indicate up to 39% of adolescent girls go on extreme single-food diets and fast or induce vomiting to lose weight rapidly (Schooler, 2008).

Cultural Influences on Body Image

Scholarship examining factors influencing body image has consistently focused on the role culture plays in shaping societal standards for what is considered beautiful and desirable (Cachelin, Rebeck, Chung, & Pelayo, 2002; Nishina et al., 2006). Ideal standards of female beauty foster women's orientation toward a specific body type and media outlets, such as magazines, movies, and television, play a significant role in propagating these ideal body types (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Tiggemann, 2011). Within North American culture, sociocultural attitudes towards female beauty highlight a slender waif-like figure and media representations of women's' bodies are skewed towards thinness (Franko et al., 2013; Hall et al., 2011). Adolescent girls' self-perception as someone with a non-ideal body type can result in body dissatisfaction (Menon & Harter, 2012; Schooler & Daniels, 2014) and unintended consequences, such as unhealthy eating (Grabe et al., 2008; Tiggemann, 2011) and decreased well-being (Crow, Eisenberg, Story, & Neumark-Sztainer, 2006; Hutchinson, Rapee, & Taylor, 2010; Stice & Shaw, 2002; Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006).

An increasing number of studies are now examining how North American female beauty standards compare to those of other cultures that have different values about body shape and size and variations in media portrayal of body types (Gillen & Lefkowitz, 2012; Nishina et al., 2006). Historically, the majority of body image research centered on White

females in the United States (Franko et al., 2013; Schooler & Daniels, 2014), despite the fact that body dissatisfaction had been found to be prevalent among girls and women of color in the United States (Schooler, 2008). Initial efforts to involve minority women in body image research included African-American women. Findings from these studied primarily indicated that women of color experienced fewer body image concerns compared to White women (Gillen & Lefkowitz, 2012), which was attributed to greater acceptance of curvier bodies within African American culture. This suggests ethnic identity may serve as a buffer among African American women, by increasing a positive body image and protecting them from negative feelings about their bodies (Gillen & Lefkowitz, 2012; Schooler & Daniels, 2014). Fewer studies have examined body image concerns among Latinas in the United States and how they relate to culturally constructed standards of beauty (Gillen & Lefkowitz, 2006; Nishina et al., 2006; Schooler, 2008; Schooler & Daniels, 2014).

Latina Adolescents and Body Image

Latin culture, like African American culture, has been found to value a "curvier" and "thicker" feminine figure, compared that idealized in North American culture (Franko et al., 2013; Schooler, 2008; Schooler & Daniels, 2014). In a recent study, Schooler and Daniels (2014) examined the potential buffering effects that an ethnic identity provides among Latina girls. In this study adolescent Latinas were shown images of sexualized White women and asked to write descriptions of their own body and appearance using "I am" statements. The researchers found that adolescent Latinas who included ethnic descriptions wrote more positive statements about their appearance. The authors interpreted their findings as evidence for the protective role that an ethnic identity can serve against the overly thin Western female body standards. In another study, Rivadeneyra, Ward, and

Gordon (2007), found that a stronger Latina identity moderated the relation between TV viewing and appearance-related self-esteem.

Despite the potential buffering effects of a Latin identity, empirical findings indicate Latinas report body dissatisfaction rates that are comparable to White female adolescents, or even higher (Gillen & Lefkowitz, 2006; Nishina et al., 2006; Schooler, 2008; Schooler & Daniels, 2014). The elevated rates of body dissatisfaction among Latinas have been associated with the stress of acculturation and the internalization of Western standards of beauty (Menon & Harter, 2012). Latina adolescents growing up in the United States are often confronted with the task of balancing North American cultural values and those offered by their Latino/a families and communities (Menon & Harter, 2012; Schooler & Daniels, 2014). Literature examining acculturation and cross-cultural standards of beauty find that the cultural norms provided by North American and Latino/a cultures conflict, as the thin figure prioritized in the United States contradicts the curvier shapes frequently embraced in Latino/a cultures (Menon & Harter, 2012). The process of balancing influences from a dominant culture and a heritage culture has been associated with stress, body dissatisfaction, and increased eating disorder symptoms among Latina college women (Menon & Harter, 2012). Furthermore, research findings suggest that Latina women who internalize Western ideals of a thin female body type experience negative perceptions of their body and disordered eating (Franko et al., 2013; Schooler, 2008). A longitudinal study conducted by Schooler (2008) found that girls who were more acculturated to US ideals of beauty revealed a decline in body satisfaction among adolescents.

Outcomes Associated with Body Image

Previous studies of body image have often focused on the negative consequences associated with body dissatisfaction, which include psychological, behavioral, and social problems (Grabe et al., 2008; Markey, 2010; Nishina et al., 2006; Tiggemann, 2011). For example, with regard to body dissatisfaction and physical and mental health outcomes, prior studies have found that negative body image is associated with low self-worth, depression, and anxiety (Davison & McCabe, 2006; Nishina et al., 2006). Moreover, negative body image has been linked to disordered eating behaviors and clinical eating disorders, such as bulimia and anorexia nervosa (Grabe et al., 2008; Markey, 2010; Menon & Harter, 2012). Disordered eating includes maladaptive dieting behaviors, including fasting and vigorous exercising (Grabe et al., 2008; Hall et al., 2011; Markey, 2010; Stice & Shaw, 2002). Scholars examining the efficacy of weight-loss strategies have found evidence that maladaptive dieting often leads to an increase in food intake, binge eating, and weight gain (Markey, 2010). Therefore, researchers have noted that body dissatisfaction contributes to obesity through adopting negative dieting behaviors (Markey, 2010). There is much less research literature that has examined outcomes that may be associated with positive body image. Although the number of studies is scant, initial results suggest positive body image may be linked to greater levels of self-esteem, optimism, and well-being (Wood-Barcalow, Tylka, & Augustus-Horvath, 2010), as well as an increased engagement in and enjoyment of physical activity (Frisen & Holmqvist, 2010).

Body image also plays a significant role in social interactions, particularly among adolescents, as their need to conform peaks during this stage of development (Davison & McCabe, 2006; Markey, 2010). Researchers have found interpersonal skills, positive

relationships, and perceptions of social relations are impacted by physical appearance (Hutchinson, Rapee, & Taylor, 2010). Body dissatisfaction has been found to increase the risk of bully victimization (Davison & McCabe, 2006) and hinder the development of an adolescent's interpersonal skills and peer relationships (Markey, 2010). In addition, research findings indicate girls who are physically attractive receive more positive feedback from others and engage in more positive social interactions compared to girls who are less physically attractive (Davison & McCabe, 2006). Given these findings, it is important to examine whether such results extend to culturally diverse samples, such as adolescent Latinas.

Current Study

The purpose of the present paper is to fill gaps in the literature concerning body image research. The majority of studies have focused on White females. When Latinas have been included, the samples primarily consisted of Latina college students (Demarest & Allen, 2000; Rubin, Fitts, & Becker, 2003) and adult Latinas (Cachelin et al., 2002; Pompper & Koenig, 2004). Few studies have examined mid-adolescent Latinas between the ages of 14 to 16 years (Romo, Mireles-Rios, & Hurtado, 2015). Another limitation of body image research concerns the focus on negative conceptualizations of body image, such as body dissatisfaction, as opposed to a positive reframing of this issue, such as body appreciation. While the former intends to identify processes associated with physical and mental health problems (Fergus, & Zimmerman, 2005; Garmezy, & Masten, 1991), the latter needs further research and has the potential to identify processes that yield positive outcomes.

Latent Class Analysis (LCA) affords the opportunity to disentangle heterogeneity in Latina adolescents' positive and negative attitudes towards their bodies. Specifically, this person-centered approach can group Latina adolescents based on having similar patterns of both positive and negative body image experiences. This extends previous research that has primarily focused on either body dissatisfaction or body appreciation, but has not investigated how they might coexist. Furthermore, as few studies have examined positive outcomes resulting from body appreciation, and because the negative consequences linked to body dissatisfaction have largely been limited to disordered eating and depression, there is a need to explore additional social-emotional outcomes, particularly among Latina adolescents.

In light of these gaps in the research literature, the current study sought to first identify profiles of both positive and negative body image experiences among Latina adolescents. Second, the emergent body image profiles were linked to several physical and psychosocial outcomes, including disordered eating, social engagement, and self-worth. These findings can expand our understanding of how Latina adolescents perceive their bodies and assist in the development of treatment and prevention program that increase body appreciation and social-emotional well-being and decrease body dissatisfaction and disordered eating.

Methods

Participants

Participants were selected according to the following criteria: 1) adolescent girls who self-identified as Latina (both immigrant and non-immigrant); 2) adolescent girls of ages 13 to 19 years; and 3) adolescent girls in high schools (9th grade or above). Participants were excluded if they were pregnant or had babies at the time of recruitment, or if they had

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serious mental disabilities. The final sample was composed of $N = 94$ Latina adolescents attending a high school in southern California between the ages of 13 to 19 ($M = 14.90$, $SD = 1.023$). Specifically, 40% were age 14 years, 41% were age 15 years, 12% were age 16 year, 4% were age 17 years, 2% were age 18 years, and 1% were 19 years old. The majority of the students were in 9th and 10th grade (9th grade, 39%, 10th grade, 46%, 11th grade, 11%, 12th grade, 4%).

Procedure

Recruitment took place in physical education classes at the end of the academic school year. A week prior to data collection, researchers made a presentation in class describing the nature of the study. Ample time was provided for girls to ask questions. A parental consent form was distributed, and researchers asked students to return the signed form to their teachers if they were interested in participating in the study. It was emphasized that participation was voluntary.

On the day of data collection, a 30-minute pencil and paper survey was administered to participants in a private location at the school during their physical education class period. Only students who returned the signed parental consent form were allowed to take the survey. Prior to completing the survey, researchers described the assent form, and had the students read and sign it. The girls were given a gift card to a local store for compensation regardless of whether or not they finished the survey.

Measures

The Positive Body Image Survey. The Positive Body Image Survey (Romo, Mireles-Rios, & Nylund-Gibson, 2012) was created for the purpose of measuring participants' characteristics, body image perceptions, engagement in health-promoting

behaviors, and protective factors, focusing on adolescent girls beginning at age 13. Questions related to participant characteristics included adolescents' age, national origin, grade, ethnicity, height, weight, and perceptions of weight status. Items were in a mixed format including open-ended questions, fill-in-the-blank, check box, and Likert-scales.

Items on the Positive Body Image Survey used for the LCA reflected body self-esteem, body appreciation, and body shape satisfaction. Specifically, six items from the survey were selected to capture adolescents Latinas' perceptions about their bodies. Three items reflected a positive self-image, which included "I respect my body," "I am proud of my body," and "I am pretty happy about the way my body looks." Conversely, three items reflected a negative self-image, which included "My feelings about my body are mostly negative," "I wish my body looked better," and "I hope to become slimmer" (refer to Table 1 and Figure 2). The response options were: *strongly disagree, somewhat disagree, somewhat agree, strongly agree*. These weres converted to a dichotomous scale, with responses of disagreement being coded as 0 and responses of agreement coded as 1.

Distal Outcome Items.

Two self-report items were used to measure disordered eating behaviors. The first assessed the frequency with which participants dieted in the past year. Adolescents were asked, "In the past year, how many times have you gone on a diet?" The response options were: 0 = *Never*, 1 = *Once*, 2 = *Twice*, and 3 = *Three or more times.* The second item measured uncontrollable eating, "I eat food uncontrollably," and the response options were: 0 = *Never,* 1 = *Rarely*, 2 = *Sometimes*, 3 = *Often*, and 4 = *Very Often.*

Social engagement was measured using two self-report items. The first asked participants to indicate how many friends they have using a three-point Likert scale, 0 = *I*

have plenty, 1 = *I have some, but wish I had more*, and 2 = *I don't have any.* The second item asked adolescents the degree to which they feel alone ("I feel alone") using a three-point Likert scale of 0 = *I don't feel alone*, 1 = *Often*, and 2 = *Always*.

Two self-report items were used to measure self-esteem. The first item asked participants to report the degree to which they liked themselves using a three-point Likert scale, 0 = *I hate myself,* 1 = *I do not like myself*, 2 = *I like myself.* The second item asked adolescents to indicate the degree to which they disapprove of their own appearance, using the following three-point Likert scale, 0 = *I look okay,* 1 = *there are some bad things*, and 2 = *I look ugly.*

Data Analysis Plan

Latent Class Analysis. A latent class analysis (LCA; Goodman, 1974; Magidson & Vermunt, 2004; **Muthén**, 2001) was run using M*plus* 7.3 (Muthén & Muthén, 1998-2013) to explore if there are subgroups of girls who differed on their self-perceived body image. The indicators to measure the latent class variablewere the six items from the Positive Body Image Survey. A conceptual diagram depicting the LCA is presented in Figure 1. LCA is a model-based cluster analysis technique that is most commonly used in an exploratory fashion, which implies that there are no a priori assumptions regarding the number of latent classes, or subgroups, that will emerge. In the LCA modeling process, a series of models with differing number of latent classes are run and model fit among all models is compared, along with substantive theory, to determine the number of latent classes which best characterize the heterogeneity in Latinas' self-perceived body image. A one-class model was run first and further models were then conducted with one additional class being specified

for each subsequent model (e.g., two-class model, three-class model), until adding classes achieved little or no improvements.

Several fit indices were utilized because there is not a single statistical criterion that identifies the best fitting model (Nylund, Asparouhov, & Muthén, 2007). The fit indices that were examined included the Bayesian Information Criterion (BIC), which has been shown to most consistently identify the best fitting model (Nylund et al., 2007), and the sample size adjusted BIC (ABIC). Smaller values of these fit indices indicate a preferred model. Likelihood-based tests were also used to compare models, including the bootstrap likelihood ratio test (BLRT) and the Lo-Mendell-Rubin (LMR) test. Both of these tests provide a *p*-value that indicates whether adding an additional class results in a significant improvement in the better model compared to the previous model with one less class. A non-significant *p*-value indicates adding an additional class did not significantly improve the model. Therefore, the preferred model, based on this criterion, is the previous model with one less class. Entropy was also examined and measures how well participants are grouped into the latent classes. This was examined for the final preferred model only as this is not considered a fit statistic. Entropy values range between zero and one, with higher values indicating better classification of individuals into classes. Values greater than .80 are generally considered acceptable.

In addition to fit indices, substantive interpretation was considered when selecting the final number of classes. Item-probability plots were examined to interpret the classes and subsequently provide labels for them.

Distal outcomes. Once the preferred unconditional model was identified, distal outcomes were included using the BCH approach (Bolck, Croon, Hagenaars, 2004; Bakk &

Vermunt, 2016). The six distal outcomes reflect the psychological, behavioral, and social-emotional functioning of the participants. These items were drawn from the disordered eating behaviors, social engagement, and self-esteem measures. Distal outcomes contribute predictive validity to the latent classes and allow for the identification of significant mean differences across all pairwise comparisons of the latent classes. The BCH approach applies weights to each individual, based on their posterior probabilities of membership in each class, which avoids shifts in the latent classes when distal outcomes are added to the unconditional model. Since the aim of this study was to identify latent classes based solely on responses to the body image items, the BCH method was used to ensure the inclusion of the distal outcomes would not influence the formation of the latent classes. Class-specific means of the distal outcomes were estimated and tested for significant differences across the emergent latent classes using a series of Wald tests.

Results

Descriptive Statistics

Descriptive statistics of the body image and distal outcome items are presented in Table 1. The item, "My feelings about my body are mostly negative," produced the lowest proportion of endorsement (38%), and the items, "I respect my body" (84%) and "I wish my body looked better" yielded the highest proportions of endorsement (84%). This was surprising as it suggests a significant proportion of the sample agreed they respected their body but also wishied it looked better. In addition, a large percentage of Latina adolescents reported hoping to become slimmer (83%). Regarding the three positive body image items, more Latina adolescents endorsed respecting their body (84%) compared to feeling proud (53%) or happy (46%) about their body.

Latent Class Enumeration

For the LCA, a one-class model was first conducted, and then one additional class was added in each subsequent iteration. Models that ranged from one to six classes were examined. Fit information for all models is presented in Table 2.

The majority of the fit indices supported a two-class model (see Table 2). The BIC and ABIC reached a minimum value at the two-class model. The first non-significant p-value of the LMR was found at the three-class model, providing further evidence for a two-class model. The first non-significant p-value of the BLRT was found at the three-class model, also indicating that adding a third class did not provide a significant improvement over the two-class model. Thus, the two-class model was chosen as the preferred model. The entropy value for the two-class model was .83, suggesting the participants are grouped into these classes well.

Naming the Latent Classes

Item-probability plots were used to describe and label the classes. These plots present the probability that a participant from a given class will endorse a particular item. Figure 2 depicts the item-probability plots with the body image items along the x-axis, and the probability of endorsing the items along the y-axis. The first three items are associated with positive body attitudes and the next three reflect negative body attitudes.

The class identified by triangle markers and a dashed line had a relatively high probability profile across five of the six items and included 52% of the sample. These adolescents had a high probability of endorsing all three items related to positive body image (respecting their body and feeling proud and happy about their body). In addition, they reported wanting to look better and become slimmer. However, they had a low

probability of endorsing feeling negatively about their body. Because of their positive body image, coupled with a desire to become slimmer and look better, this class was labeled *Positive Attitude and Hoping to Change Body* and consisted of 52% of the sample.

The second class reported high probabilities of endorsement regarding all three items related to a negative body image. Specifically, they had a high probability of reporting negative feelings toward their body, hoping to become slimmer, and wishing their body looked better. Interestingly, they also had a high probability of endorsing the item, "I respect my body," although they endorsed overall low levels of feeling proud and happy about their body. Due to their primarily negative body image, this class of Latina adolescents was labeled *Negative Attitude and Hoping to Change Body.*

Class Differences in Disordered Eating Behaviors, Social Engagement, and Self-Esteem

Distal outcome results are presented in Table 3. The column to the far right of Table 3 displays whether the difference between the class-specific mean scores for a given distal outcome was statistically significant. The *Negative Attitude and Hoping to Change Body* class had a significantly higher mean score on the item measuring uncontrollable eating ($M = 1.61$) and the item measuring number of diets in the past year ($M = 1.57$) compared to the *Positive Attitude and Hoping to Change Body* class ($M = 0.96$ and $M = 0.68$ respectively). The *Negative Attitude and Hoping to Change Body* class also had a significantly higher mean score on the item measuring dissatisfaction with looks ($M = 1.22$) and the item measuring feeling alone ($M = 0.84$), compared to the *Positive Attitude and Hoping to Change Body* class ($M = 0.36$ and $M = 0.46$ respectively). The *Positive Attitude and Hoping to Change Body* class had a significantly higher mean score on the item measuring the

degree of liking oneself (*M* = 1.82) compared to the *Negative Attitude and Hoping to Change Body* class (*M* = 1.21).

Discussion

This study utilized LCA to empirically identify body image profiles among adolescent Latinas based on both positive and negative body image attitudes at varying degrees. LCA results showed preference for a two-class model composed of a *Positive Attitude and Hoping to Change* class and a *Negative Attitude and Hoping to Change* class. Class membership was then used to predict multiple psycho-social outcomes, including disordered eating, self-esteem, and social engagement. The *Negative Attitude and Hoping to Change* class demonstrated generally poorer outcomes, as they reported greater levels of disordered eating and lower functioning with regard to self-esteem and social engagement. Overall, these findings highlight the need for researchers to use methods that allow participants to endorse both positive and negative body image experiences and to design programs that foster body appreciation and psychosocial well-being as well as decrease body dissatisfaction and disordered eating.

Descriptive statistics demonstrated that over 80% of the sample of adolescent Latinas reported they wished their body looked better and hoped to become slimmer. This finding aligns with previous research that has indicated the prevalence of body dissatisfaction among high school girls, in general, is as high as 80%, and that rates among Latinas are comparable (Schooler, 2008; Schooler & Daniels, 2014). The adolescent females sampled in these previous studies were primarily White, suggesting adolescent Latinas experience body dissatisfaction at comparable rates. Interestingly, descriptive statistics also revealed over 80% of the sampled Latinas reported respecting their body. This may be a reflection of

cultural norms and values among Latinas that promote the appreciation of a feminine curvy body (Franko et al., 2013; Schooler & Daniels, 2014). These results highlight both the need to address body dissatisfaction among adolescent Latinas and, further, to explore the concept of body respect as a potential avenue to promote positive body attitudes.

Subgroups of Body Image Self-Perceptions of Adolescent Latinas

Results from the LCA revealed two subgroups of adolescent Latinas, a *Positive Attitude and Hoping to Change* class and a *Negative Attitude and Hoping to Change* class, that were similar in size (52% and 48% respectively). Both groups endorsed one of the positive body image items, "I respect my body," and also two of the negative body image items, "I wish my body looked better," and "I hope to become slimmer." Therefore, neither group endorsed only positive or negative body image attitudes, but combinations of both. This suggests body image experiences may be more nuanced than previously thought, particularly among adolescent Latinas in the United States who are influenced by multiple cultural norms. Specifically, Latina adolescents growing up in the United States are confronted with the task of balancing North American cultural values that highlight an overly thin figure and Latin cultural values that embrace curvier shapes (Menon & Harter, 2012; Schooler & Daniels, 2014). This process may foster both positive and negative body-related self-perceptions.

Three items separated the two emergent classes, which focused on feelings of pride, happiness, and negativity about one's body. Adolescent Latinas in the *Positive Attitude and Hoping to Change* class endorsed feeling proud and happy about their body, and did not report having overall negative feelings about their body. Latinas in this group also endorsed respecting their bodies, wishing their body looked better, and hoping to become slimmer.

This suggests about half of the adolescent Latinas in the sample endorsed wanting to look better and be slimmer, despite feeling proud, happy, respectful and positive towards their body. This may further indicate that the sampled Latinas internalized both Latin cultural norms that promote the appreciation of a curvier feminine body and also Western cultural norms that idealize an excessively slender figure (Franko et al., 2013; Menon & Harter, 2012; Schooler & Daniels, 2014). Future research should examine whether this finding can be generalized to adolescent girls from other cultural and ethnic backgrounds to expand knowledge of how youth experience both positive and negative body images across cultures.

The *Negative Attitude and Hoping to Change* class endorsed items related to feeling mostly negative about their bodies, wishing they looked better, and hoping to become slimmer. Though they reported respecting their bodies, they endorsed low levels of feeling pride and happy about their bodies. This finding was surprising as one would expect congruency among these three body related feelings. Although only speculative, this finding suggests that respecting one's body does not necessarily translate into positive self-perceptions of body image. Future research may want to examine factors that contribute to this incongruency.

Outcomes Related to Body Image Subgroups

The *Negative Attitude and Hoping to Change* class demonstrated poorer outcomes, as they reported greater levels of disordered eating and lower functioning with regard to self-esteem and social engagement. Regarding disordered eating, the *Negative Attitude and Hoping to Change* class yielded a higher mean score on both measures, uncontrollable eating and number of diets, compared to the *Positive Attitude and Hoping to Change* class. This aligns with previous research findings that indicated body dissatisfaction is associated

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with disordered eating (Grabe et al., 2008; Markey, 2010; Stice & Shaw, 2002; Tiggemann, 2011) and provides additional insight into what specific kinds of maladaptive eating behaviors are linked to having a negative body image. In terms of self-esteem, the *Negative Attitude and Hoping to Change* class reported greater dissatisfaction with their appearance and lower levels of liking themselves. This is in conjunction with previous empirical evidence that suggests body dissatisfaction is related to low self-worth, negative affect, and depression (Davison & McCabe, 2006; Nishina et al., 2006).

With regard to social engagement, significant mean differences were not identified between the two subgroups with regard to number of friends, although those in the *Negative Attitude and Hoping to Change* class endorsed significantly higher rates of feeling alone. This partially supports prior research indicating body dissatisfaction has a negative impact on social relationships (Davison & McCabe, 2006; Markey, 2010). It is reasonable to interpret the nonsignificant difference with regard to number of friends in a positive light, as it suggests a negative body image among adolescent Latinas does not prevent them from maintaining friendships. However, it may be an indication that these friendships are less supportive and engaging, as Latinas in this group reported feeling more alone, despite having similar numbers of friends as Latinas in the *Positive Attitude and Hoping to Change* class. Given these findings, preventive programs and interventions designed for Latina adolescent may want to address disordered behaviors, cultivate healthy levels of self-esteem, and foster nurturing relationships among peers to promote feeling supported and connected to a social network.

The poorer outcomes reported by the *Negative Attitude and Hoping to Change* class appear to have been driven primarily by feeling lower levels of pride and happiness towards

one's body, and by higher levels of negative feelings toward one's body, as these are the items that predominantly differentiated the two subgroups. This finding suggests respecting one's body was not sufficient to ameliorate worse outcomes compared to adolescent Latinas that felt proud and happy about their bodies. Therefore, preventive programs and interventions designed for adolescent Latinas may need to focus on decreasing negative feelings and work to increase feelings of pride and happiness towards one's body, in addition to respecting it. These recommendations align well with current trends in the literature that are encouraging practitioners to promote positive body-related attitudes among youth with the hopes of preventing eating disorders (O'Dea & Abraham, 2000; McVey & Davis, 2002). This approach is in direct contrast to previous interventions that have focused on delineating the dangers associated with disordered eating and have been found to be largely ineffective (McVey & Davis, 2002; Moreno & Thelan,1993).

Limitations

Several limitations were identified in the current study. The study sample included adolescent Latinas from one school in a suburban location of California. This poses a threat to external validity as results may not be generalizable to youth of varying genders, cultural backgrounds, and ethnicities. In addition, they may not apply to adolescents in schools with different demographics, such as gender, age, ethnicity, and SES, all of which may influence body image attitudes, disordered eating, self-esteem, and social engagement. Furthermore, adults were present while participants completed the survey, which may have influenced their responses. Moreover, the students who did not complete the survey may have been systematically different from the study sample and these participants might have been unrepresented in the present study. Finally, since self-report measures were used,

participants may have interpreted the items differently and responded in a socially desirable manner.

Conclusion

This study makes several contributions to the literature. The majority of body image research has used a pathology-focused lens by examining negative conceptualizations of body image. Moreover, few studies to date have explored how adolescents from diverse cultural backgrounds experience body image. As such, the current study fills a substantial gap in the literature by identifying two distinct groups of adolescent Latinas that endorsed both positive and negative body image attitudes, and then linked these profiles to various psychosocial outcomes. The *Negative Attitude and Hoping to Change* class demonstrated generally poorer outcomes, as they reported greater levels of disordered eating and lower functioning with regard to self-esteem and social engagement. These findings underscore the need for preventive programs and interventions designed for adolescent Latinas to focus on increasing positive attitudes about the body and self-esteem, decreasing negative body-related feelings and disordered eating, and foster nurturing relationships among peers.

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Table 1. *Descriptive Statistics of the LCA Indicators and Distal Outcomes* (*N* = 94)

Variables	*M*	*SD*
Latent Class Analysis Items		
I respect my body	0.84	0.37
I am proud of my body	0.53	0.50
I am pretty happy about the way my body looks	0.46	0.50
My feelings about my body are mostly negative	0.38	0.49
I wish my body looked better	0.84	0.37
I hope to become slimmer	0.83	0.38
Distal Outcomes		
Frequently of eating food uncontrollably	1.21	1.12
Frequency of diets in the last year	1.12	1.10
Number of friendship (plenty, some, or no friends)	0.34	0.54
Frequency of feeling alone	0.60	0.65
Dissatisfaction with looks (looking okay, bad, or ugly)	0.74	0.76
Degree of liking oneself (I hate, dislike, or like myself)	1.57	0.58

Note. M = Mean; SD = Standard Deviation.

Table 2. *Fit statistics of the Six LCA Models*

Number of classes	Log likelihood	BIC	ABIC	*p*-value of BLRT	*p*-value of LMRT
1	-319.22	665.70	646.76		
2	-271.49	602.05	561.01	< .001	< .001
3	-267.19	625.25	562.11	1.00	0.07
4	-263.94	650.54	565.30	0.60	0.20
5	-260.10	674.66	567.33	0.24	0.11
6	-257.67	701.61	572.17	0.67	0.20

Note. BIC = Bayesian Information Criterion; ABIC = Adjusted Bayesian Information Criterion; BLRT = Bootstrapped Likelihood Ratio Test; LMR = Vuong-Lo-Mendell-Rubin Likelihood Ratio Test.

Table 3. *Distal Outcome Means by Latent Class*

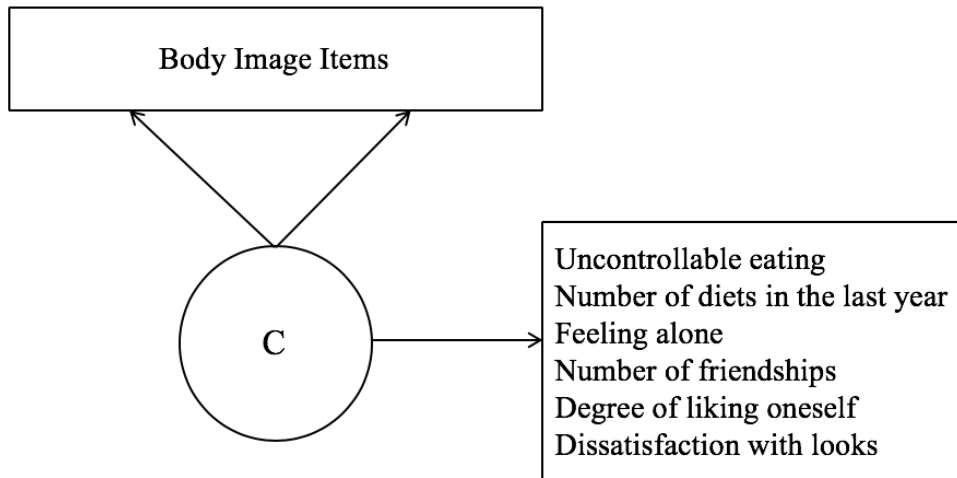| Distal Measure	Positive attitude and hoping to change body	Negative Attitude and hoping to change body	*p*-value of difference
Uncontrollable eating frequency	0.96	1.61	< .01
Number of diets in the last year	0.68	1.57	< .01
Frequency of feeling alone	0.46	0.84	0.01
Plenty, some, or no friends	0.26	0.48	0.10
Degree of liking oneself	1.82	1.21	< .01
Dissatisfaction with looks	0.36	1.22	< .01

Figure 1. Conceptual diagram of the LCA model with distal outcomes. The circle represents

the latent class variable, the box above the circle represents the observed indicators used to

measure the latent class variable, and the box to the right of the circle represents the
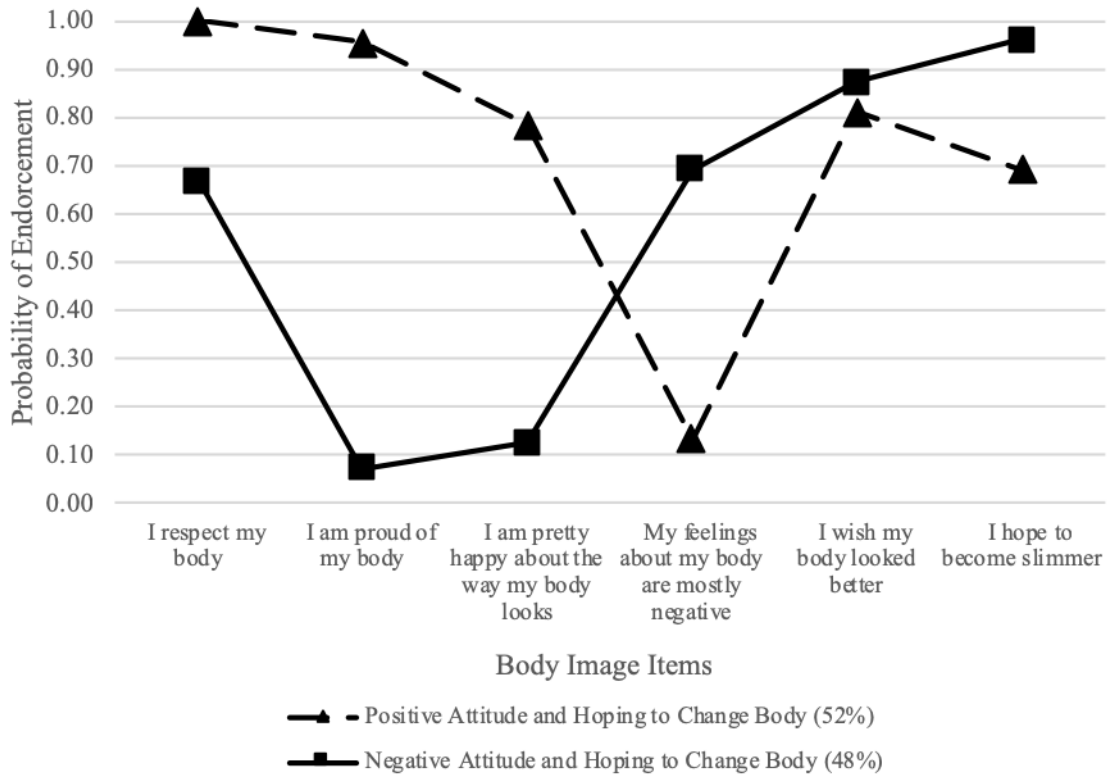
observed distal outcomes.

Figure 2. Item probability plot of the 2-class LCA solution.