Sociocultural Variations in the Body Image Perceptions of Urban Adolescent Females

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This study investigated the influences of ethnicity, socioeconomic status, and ethnic peer group composition on awareness and internalization of socially sanctioned standards of appearance using the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ). The researchers surveyed a convenience sample of 208 adolescent females at an ethnically diverse urban high school. Statistical analyses found that ethnicity influenced awareness of socially sanctioned standards of appearance but the effects of ethnicity varied by level of caregiver educational attainment. Ethnicity and caregiver educational attainment together accounted for variance in the internalization of these standards. Moreover, African American girls with ethnically heterogeneous peer groups had significantly higher awareness and internalization scores than those without mixed friends. These findings highlight the importance of multiple ecological factors in assessing risk for disturbed body image and eating disorders. Ethnicity remains an important predictor of disturbed body image but should be treated as a dynamic, rather than a fixed risk factor.

KEY WORDS: body image; urban adolescent girls; eating disorders; ethnic and SES variations; peer group composition.

INTRODUCTION

Eating disorders such as anorexia, bulimia, and excessive dieting are prevalent among adolescent females in contemporary U.S. society (Brumberg, 1988; Kreipe *et al.*, 1995; Phelps and Bajorek, 1991; Schoen *et al.*, 1997). Eating disorders often lead to severe and potentially long-lasting health and mental health consequences, ranking as young women's third most common chronic illness. Treatments for these disorders are costly with relatively low success rates, and at least 10% of anorexia cases are fatal (Fisher *et al.*, 1995; National Institute of Mental Health, 1993).

Clinical theorists agree that interactions between sociocultural factors and negative body image perceptions play a critical role in the etiology of eating disorders (Bruch, 1973; Garfinkel et al., 1992; Garner et al., 1980; Rosen, 1990; Steiner-Adair, 1986). These sociocultural factors include ethnicity, social class, culture, family and school contexts, as well as peer norms and pressures. Because disturbed body image is so intertwined with cultural forces and dynamics, there is wide variation in the way that adolescent females internalize dominant societal standards of thinness and beauty. A more thorough understanding of the role of these contextual factors in the development of disturbed body image, and consequently eating disorders, is needed to formulate more effective prevention and intervention strategies for the adolescent female population.

Body Image: Ethnic Variations

Numerous studies document a more positive body image among women of color, particularly African Americans, compared to White women. This trend corresponds

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with the fact that over 90% of severe eating disorder cases (anorexia and bulimia, more specifically) are currently diagnosed among adolescent and young adult White females (Barlow and Durand, 1995). The relatively low prevalence of eating disorder diagnoses among women of color has been attributed, in part, to greater body satisfaction and more positive body image. Cash and Henry's survey of a nationally representative sample of 803 adult women found a "normative discontent" with their physical appearance (Cash and Henry, 1995). Body image attitudes were relatively uniform across age groups, yet varied significantly by ethnic group, with African American women maintaining a more positive body image than Whites or Latinas. Additional studies confirm that African American women have a more positive body image than White women (Casper and Offer, 1990; Desmond et al., 1989; Fisher et al., 1994; Henriques et al., 1996; Powell and Kahn, 1994; Rosen et al., 1987; Rucker and Cash, 1992).

However, recent empirical research challenges the widely accepted hypothesis that ethnic minority women, especially African Americans, experience fewer eating disturbed behaviors and have healthier body image perceptions (Crago et al., 1995; Gard and Freeman, 1995; Smith and Krejci, 1991; Thompson, 1996). These studies find that ethnicity may not be the most salient or differentiating factor. Rather, factors associated with ethnicity, such as acculturation level, self-esteem, or socioeconomic status, function as the true risk or protective factors, yet they are masked in various measurements by ethnicity. Moreover, the standard measurements of body image may be culturally biased, failing to take into account the culturally different standards of beauty that women hold (Crago et al., 1995; Parker et al., 1994). Overall, the research literature is contradictory and thereby limited in its ability to make strong conclusions regarding ethnic variations in adolescent females' body image perceptions.

The Influence of Socioeconomic Status

Like race or ethnicity, socioeconomic status (SES) is an ambiguous factor in the etiology of disturbed body image and eating disorders. Earlier studies found a high prevalence of eating disorders among females in high SES groups, with a comparatively low prevalence among those in lower SES groups (Barlow and Durand, 1995; Bruch, 1973). Gard and Freeman (1995) reviewed 8 studies conducted in the 1970s and early 1980s, all of which showed anorexia to be more prevalent among higher SES females. They concluded, however, that recent research fails to support the SES stereotype for eating disorders as a whole, the relationship between SES and anorexia remains to be empirically proven, and there is even evidence of an opposite relationship between SES and bulimia.

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Indeed, the positive correlation between higher SES and risk of disturbed body image is far from firmly established. A recent study of undergraduate students found no significant difference between SES groups on a standardized body image scale (Abell and Richards, 1996). In addition, when participants were grouped into 3 SES groups, the upper SES participants wanted to be larger and heavier, while the lower SES participants wanted to be thinner and weigh less. Miller *et al.*'s recent study demonstrated a similar trend, finding that female students in a low SES rural area had significantly higher levels of eating disorder risk than those from a less rural and more prosperous region (Miller *et al.*, 1999).

Ethnic and Social Class Intersections

Recent research highlights the interaction between ethnicity and SES in the development of eating disorders and related body image perceptions. Molloy and Herzberger's study of 114 female college students found that lower SES African American women perceived heavier body styles as more attractive than higher SES African American and White women of all SES groups (Molloy and Herzberger, 1998). Another study found that the extent to which African American women identify with the dominant White culture may make them more vulnerable to body image distortions and eating disorders, introducing the idea of "ethnic acculturation" (Bowen et al., 1991). As perceptions and norms are key factors in body image satisfaction or dissatisfaction, research suggests that the interaction of ethnic and socioeconomic differences in body image perceptions may be the most important site of variance. However, these differences have yet to be thoroughly explored in the urban adolescent female population.

Peer Contexts and Influences

Empirical research suggests that peer contexts and cultures are important factors in understanding adolescent female body image perceptions. First, research has found that a coeducational environment is a risk factor for body image disturbance compared to a single-sex school (Dyer and Tiggerman, 1996; Streigel-Moore *et al.*, 1986). Other studies document the powerful influence of peer pressure on body image and disordered eating, including the tendency for girls to compare themselves with others (Adolescent girls: Factors influencing low and high body image, 1995), and to experience pressure to lose weight by virtue of suggestions or direct teasing (Adolescent girls: Factors influencing low and high body image, 1995; Grigg *et al.*, 1996; Mukai, 1996).

Body Image Perceptions of Urban Adolescent Females

The influence of peer contexts can also be posed in relation to the ethnic composition of peer groups: does it matter if young women have ethnically heterogeneous or homogeneous friendship groups? For high-risk behaviors such as substance use, studies have shown that adolescents who are less acculturated to Euro-American standards have lower rates of alcohol abuse and delinquent behaviors (see De La Rosa *et al.*, 2000, for a review of the literature on ethnic acculturation and adolescent behavior). However, researchers have not explored ethnic peer group composition as an ecological factor contributing to disturbed body image among adolescent females.

Purpose of Study

While a substantial body of research has examined the influence of ethnicity on women's body image perceptions, there is no consistent understanding of the interaction of ethnicity with other contextual variables. This study seeks to build a more refined theoretical understanding of the contextual dimensions of body image perceptions among urban adolescent females in a mixed ethnic and socioeconomic environment. Given the current knowledge base, this exploratory study does not pose specific research hypotheses. Using ethnicity as a primary variable of interest, this paper will investigate the following research questions: (1) what are the unique and interacting influences of ethnicity and caregiver educational attainment (a proxy for SES) on awareness and internalization of societal standards of thinness among urban adolescent females at an ethnically diverse high school? (2) Within ethnic groups, how does ethnic peer group composition mediate these body image perceptions?

METHOD

Study Design and Data Collection

The researchers conducted a cross-sectional survey with a convenience sample of female students from an ethnically diverse urban public high school in the San Francisco Bay Area. The study population consisted of students enrolled in 13 physical education classes. Students voluntarily completed an anonymous, selfadministered survey that included the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ) (Heinberg *et al.*, 1994) and additional demographic items. The sample included all students who attended 1 of 13 physical education dance classes on the day that the survey was administered. Females comprised the majority of students enrolled in these classes and thus they were purposively selected for survey administration. A total of 273 students participated in the study. The researchers excluded 34 surveys because they were either (a) completed by males or were (b) unreliable due to incomplete responses. An additional 31 surveys were excluded because the respondents did not identify a primary ethnic group. A total of 208 surveys were included in the final statistical analyses.

Measurement

Dependent Variables

The 14-question version of the SATAQ (Heinberg *et al.*, 1994) measured level of agreement with dominant, culturally sanctioned societal standards of female appearance mainly related to idealized thinness. Subjects responded to the items using a 5-point Likert scale, with higher values representing greater agreement with each statement. The SATAQ contains 2 established summary scores: (1) awareness of dominant societal standards of appearance (8 questions) and (2) internalization of these standards (6 questions). Each factor is related, although internalization is stronger, to multiple measures of body image and eating disturbance. Thus a higher score on the SATAQ can be used to indicate risk for development of eating disorders (Heinberg *et al.*, 1994).

Prior validation of this scale reported a Cronbach's alpha of 0.71 for the awareness subscale and 0.88 for the internalization subscale (Heinberg *et al.*, 1994). Table I lists the reliability (alpha) subscale coefficients for each of the 4 ethnic groups in this study and in the aggregate. For the current sample, the awareness subscale had an internal consistency coefficient of 0.88 and the internalization subscale had an alpha of 0.72. Alpha coefficients for both summary scores (awareness and internalization) were nearly equivalent across ethnic groups. Prior research has also used this scale with similar populations of middle- and high-school age females and across ethnic groups (Cusumano and Thompson, 1997; Stice *et al.*, 1998; Twamley and Davis, 1999).

 Table I. Reliability (alpha) Coefficients for SATAQ Summary Scores, by Ethnicity

	Awareness score	Internalization score
Aggregate ($n = 208$)	0.88	0.72
African American $(n = 121)$	0.84	0.70
White $(n = 39)$	0.91	0.70
Latina $(n = 28)$	0.92	0.81
Asian $(n = 20)$	0.87	0.71

Independent Variables

The independent variables measured through selfreport included ethnicity, caregiver educational attainment, caregiver employment status, mixed friends, and age. These variables are operationalized below.

Ethnicity. Participants self-reported their primary ethnic group membership as White, African American, Latina, or Asian American.

Caregiver Educational Attainment. Participants identified the highest education level(s) of their self-identified primary caretaker and "another adult in the household who takes care of you." Using the highest of these 2 responses, they were categorized into 4 groups: graduate degree, college degree, some college, and high school or less. This variable, although limited (see Discussion section), was intended as a proxy for SES.

Mixed Friends. Participants identified the race/ ethnicity of their "closest friends." Those who reported having friends in 3 or more ethnic groups were considered to have a heterogeneous peer group; those reporting friends in 2 or fewer groups were considered to have a homogenous peer group.

Caregiver Employment. Respondents identified the employment status of their self-identified primary caretaker and "another adult in the household who takes care of you." Using the highest of these 2 responses, they were categorized into 3 levels: full-time employment, parttime employment, or unemployed/public assistance.

Age. Age of respondent was indicated in chronological years.

Data Analysis

Summary scores for the awareness and internalization factors were computed and descriptive statistics were run on all independent and dependent variables. Bivariate analysis of variance (ANOVA) tests and Pearson correlations examined the separate influences of ethnicity, caregiver educational attainment, caregiver employment status, and age on the awareness and internalization scores. Both caregiver employment status and age showed no relationship to either summary score and were discarded in subsequent analyses. Two-way ANOVA tests examined the effects of ethnicity, caregiver educational attainment, and an interaction term on the SATAQ summary scores. Finally, within each ethnic group, separate t tests examined the influence of "mixed friends" on the awareness and internalization scores.

RESULTS

Demographics

Table II presents demographic information for the aggregate sample and by ethnic group. Fifty-eight percent of respondents were African American, 19% were White, 14% were Latina, and 9% were Asian American. Respondents' ages ranged from 13 to 18 (M = 15.6, SD = 1.2). The mean age of the Latina group was significantly higher than that for the other 3 ethnic groups [$F_{(3,201)} = 4.45$, p < 0.01].

Slightly over 14% of respondents' primary caregivers had completed high school or less, 29% had completed some college, 25% completed college, and 32% had obtained a graduate degree. Whites and Asian Americans were most likely to have parents who completed graduate degrees (49 and 45%, respectively). The highest percentage of Latina students' caregivers (39%) fell into the "high school or less" range. African Americans students' caregivers were fairly dispersed across categories, with the majority having "some college" (37%). A Pearson chisquare test revealed a significant association between ethnicity and caregiver educational attainment [$\chi^2(9) = 38.8$, p < 0.001].

Whites (33%) and Asian Americans (30%) were the most likely to report having an ethnically heterogeneous peer group (defined as 3 or more friends in different ethnic groups), followed by Latinas (14%) and then by African

	Aggregate $(n = 208)$	African American $(n = 121)$	White $(n = 39)$	Latina $(n = 28)$	Asian $(n = 20)$
Age (mean) Education (%)	15.6	15.6	15.5	16.3	15.1
HS or less	14.5	12.2	2.6	38.5	20.0
Some college	29.0	37.4	15.4	30.8	5.0
College degree	24.5	26.1	33.3	0	30.0
Graduate degree	32.0	24.3	48.7	30.8	45.0
>3 mixed friends (%)	17.8	11.6	33.3	14.3	30.0

Table II. Respondent Demographics, by Ethnicity

	Aggregate $(n = 208)$	African American $(n = 121)$	White $(n = 39)$	Latina $(n = 28)$	Asian $(n = 20)$
Awareness score					
All	17.7 (7.7)	16.1 (6.7)	20.5 (8.1)	20.1 (8.8)	18.6 (8.7)
HS or less	15.2 (7.4)	12.1 (4.3)	a	20.1 (8.8)	16.2 (9.6)
Some college	17.6 (8.4)	15.3 (7.0)	24.2 (9.7)	20.7 (9.8)	a
College degree	17.2 (6.9)	16.7 (6.3)	17.5 (7.6)	a	12.0 (3.5)
Graduate degree	19.6 (7.4)	18.7 (7.2)	21.9 (7.3)	18.6 (9.4)	21.3 (5.2)
Internalization score				× /	× /
All	17.7 (4.9)	16.9 (4.9)	19.8 (3.5)	18.5 (5.2)	16.7 (5.4)
HS or less	15.7 (4.6)	14.1 (4.2)	a	17.9 (4.6)	14.2 (5.6)
Some college	16.9 (4.8)	16.7 (4.6)	17.3 (3.4)	18.2 (6.0)	a
College degree	19.3 (4.5)	18.4 (4.5)	20.7 (3.5)	a	15.2 (5.8)
Graduate degree	18.4 (4.8)	17.0 (5.5)	20.1 (3.4)	19.5 (4.8)	18.0 (5.1)
HS or less Some college College degree Graduate degree	15.7 (4.6) 16.9 (4.8) 19.3 (4.5) 18.4 (4.8)	14.1 (4.2) 16.7 (4.6) 18.4 (4.5) 17.0 (5.5)	a 17.3 (3.4) 20.7 (3.5) 20.1 (3.4)	$17.9 (4.6) \\ 18.2 (6.0) \\ a \\ 19.5 (4.8)$	14.2 (5.6) a $15.2 (5.8)$ $18.0 (5.1)$

^{*a*}Cell size too small to compute a meaningful mean or standard deviation.

Americans (12%). This difference between ethnic groups was also statistically significant [$\chi^2(9) = 38.8$, p < .01].

Ethnic Differences in Body Image Perceptions

Table III presents means and standard deviations statistics for the SATAQ summary scores, in the aggregate, by ethnicity, and by ethnicity and caregiver educational attainment. The average awareness score for all participants was 17.7 (range 8–40, SD = 7.7) and the mean internalization score was also 17.7 (range 6–28, SD = 4.9).

Whites had the highest mean awareness score (20.5), followed closely by Latinas (20.1), Asian Americans (18.6), and finally, by African Americans (16.1). A one-way ANOVA test found that ethnicity accounted for significant variance in the awareness score [$F_{(3,197)} = 4.71$, p < 0.005]. Bonferroni follow-up comparisons revealed that only the Whites had a significant (p < 0.05) higher mean awareness score than African Americans.

Whites also had the highest mean internalization score (19.8), followed by Latinas (18.5), African Americans (16.9), and then Asian Americans (16.7). A one-way ANOVA test examining the effect of ethnicity on the internalization score was statistically significant [$F_{(3,198)} = 4.26$, p < 0.01]. Like the awareness score, the only significant follow-up comparison was between Whites and African Americans (p < 0.05).

The Effects of Ethnicity and Caregiver Educational Attainment

The descriptive statistics reported in Table III suggest that the effects of ethnicity might vary by caregiver educational attainment. For example, the African American group's mean awareness score increases consistently by level of educational attainment, from an average score of 12.1 in the high school or less category to 18.7 in the graduate degree category. To examine these effects, two-way ANOVA tests were run on both outcome variables, with ethnicity, caregiver educational attainment, and the interaction term (ethnicity × caregiver educational attainment) as the independent variables.

Table IV presents the results of the two-way ANOVA analyses. For the awareness score, the overall model was significant $[F_{(3,192)} = 3.11, p < 0.001]$, and all three terms, ethnicity, caregiver educational status, and the interaction term, were significant as well. Bonferroni follow-up comparisons revealed significant differences between African Americans and Whites (p < 0.05), and between respondents whose caregiver had attained a high school diploma or less and those who had completed graduate degrees (p < 0.05). These findings suggest that awareness

Table IV. Results of 2-Way ANOVA Tests, Using Ethnicity and Educational Caregiver Status to Explain SATAQ Summary Scores

	ANOVA			
Variable	Source of variation	Mean square	F-value	
Awareness score	Overall model	161.52	3.11***	
	Ethnicity (A)	187.06	3.60**	
	Caregiver educational status (B)	359.76	6.93***	
	$A \times B$	139.9	2.69**	
Internalization	Overall model	43.45	2.02*	
score	Ethnicity (A)	51.96	2.41	
	Caregiver educational status (B)	17.72	0.823	
	$A \times B$	16.7	0.777	

 $p^* < 0.05; p^* < 0.01; p^* < 0.001$

	Aggregate $(n = 208)$	African American $(n = 121)$	White $(n = 39)$	Latina $(n = 28)$	Asian $(n = 20)$	
Awareness score						
<3 mixed friends	17.2 (7.3)	15.5^a (6.3)	21.5 (8.0)	19.4 (8.6)	19.1 (6.6)	
\geq 3 mixed friends	19.7 (8.9)	20.4 (8.2)	18.5 (8.3)	24.5 (9.6)	17.7 (12.5)	
Internalization score						
<3 mixed friends	17.2^{b} (4.9)	16.6 ^a (4.9)	19.3 (3.5)	18.4 (5.5)	16.4 (5.5)	
\geq 3 mixed friends	19.7 (4.2)	19.7 (4.2)	21.0 (3.3)	19.0 (3.7)	17.1 (5.8)	

 Table V. SATAQ Means and Standard Deviations, by Ethnicity and Mixed Friends

^{*a*}Difference between <3 mixed friends and ≥ 3 mixed friends groups is significant at the p < 0.05 level. ^{*b*}Difference between <3 mixed friends and ≥ 3 mixed friends groups is significant at the p < 0.01 level.

varies by ethnicity and caregiver educational attainment as unique variables but that the influence of ethnicity changes at different levels of caregiver educational attainment.

For the internalization score, the overall model was significant [$F_{(3,194)} = 2.02$, p < 0.05], yet interestingly, none of the individual terms had significant *F* scores. This finding suggests that ethnicity and caregiver educational status accounted for similar variance in the internalization score. The unique effects of ethnicity on internalization were diminished when caregiver educational attainment was introduced into the model.

The Effects of Peer Group Composition

Table V lists the mean awareness and internalization scores for those participants with and without mixed friends, by ethnicity. Independent samples t tests comparing mean SATAQ summary scores between respondents with homogeneous versus heterogeneous peer groups were conducted in the aggregate and separately for each ethnic group. Results showed that in the aggregate, respondents with mixed friends had significantly higher mean internalization scores than those without mixed friends $[t_{(199df)} = -2.76, p < 0.01]$. Moreover, African American girls with a heterogeneous peer group had significantly higher awareness scores $[t_{(115df)} = -2.61, p < 0.05]$ and internalization scores $[t_{(115df)} = -2.22, p < 0.05]$ than those without mixed friends. No significant differences were found for any of the other 3 ethnic groups. It should be noted, however, that the Latina girls' scores on both factors also increased in the heterogeneous friends' group.

DISCUSSION

This study provides several key insights into the contextual factors that influence the body image perceptions of urban adolescent females in a heterogeneous school setting. While earlier studies pointed to the separate contributions of SES and ethnicity on disturbed body image, recent studies complicate and contradict these findings. This study offers a unique opportunity to understand the interaction of these contextual factors in the urban adolescent female population. Moreover, the introduction of the mixed friends variable broadens the general discussion of ethnic variations in body image perceptions.

First, this study found that primary ethnic group membership accounted for variation in awareness of dominant societal standards of appearance. Specifically, Whites had higher awareness scores than African Americans. When caregiver educational attainment was introduced to the model, both of these variables and the interaction between them were significant. These findings are not surprising given that White and higher income young women are more frequently exposed to dominant societal standards of thinness through mainstream media outlets (Brumberg, 1988). Yet the significant interaction term also suggests, in keeping with recent literature on ethnic and SES interactions (Molly and Herzberger, 1998), that SES changes the influence of ethnic group membership on young women's body image perceptions. Ethnicity in this sense can be viewed as a dynamic factor that shifts according to its relation to an individual's status in an additional social domain.

The results for the internalization score were somewhat different. The one-way ANOVA test suggested that Whites had a significantly higher internalization score than African Americans. However, the two-way ANOVA found that together, ethnicity and caregiver educational attainment accounted for a significant amount of variance in the internalization score. In this model, neither ethnicity nor caregiver educational attainment were significant on their own. These statistics lead to a tentative conclusion that these processes do vary by ethnicity, but that some of this same variation may also be explained by socioeconomic differences. The influence of ethnicity then may not be unique. However, based on the small cell sizes, repeated studies would be needed to fully clarify this finding.

Body Image Perceptions of Urban Adolescent Females

This study also explored the influence of peer group composition on the etiology of body image disturbance. This variable provides a partial understanding of the environmental context of ethnicity as it influences body image perceptions. While Miller et al. (1999) compared urban versus rural school settings and Dyer and Tiggerman (1996) compared single-sex versus coeducational schools, the school milieu where this study was conducted is unique in its ethnic and socioeconomic diversity. For African American girls only, those reporting a more ethnically diverse peer group had higher mean awareness and internalization scores, showing that maintaining a friendship group within an ethnic minority context may protect adolescent girls from the influence of dominant standards of thinness. This finding makes sense given that the White, Latina, and Asian American girls all had higher scores on the awareness factor, and that Whites and Latinas had higher mean internalization scores than African Americans. The salience of ethnic peer group composition deserves additional consideration to fully understand its role in the relationship between ethnicity and "buy-in" to dominant standards of thinness.

In sum, even within this heterogeneous school environment, ethnicity still appears to play an important role in shaping young women's body image perceptions. However, the inclusion of these caregiver educational attainment and peer group composition variables highlights the dynamic aspect of ethnicity, moving the category beyond a "fixed" risk factor for negative body image perceptions.

The authors recognize that this study is limited by its low and uneven sample sizes. Particularly for the Asian American group (n = 20), none of the analyses uncovered significant understanding of Asian American young women's relationship to body image perceptions. Instrumentation presents another limitation in this study. Because an optimally valid and reliable measure of SES such as total household income could not be attained through participant self-report, the researchers instead collected reports of caregiver educational attainment. Although this variable may not validly approximate true SES, it is often used in surveys with children and adolescents (Murdock, 2000). Moreover, the validity of the "mixed friends" variable is limited because this variable has not been previously used in other studies. However, the inclusion criterion for this variable is fairly conservative (self-reports of closest friends in 3 or more ethnic groups) to compensate for potential overreporting of ethnically diverse friends. Finally, the convenience sample of 208 young women limits the external validity of the study. Similar studies should be conducted to confirm and build upon these findings. Despite these limitations, the diverse sample and the heterogeneous nature of the study site contribute to building knowledge about sociocultural dimensions of adolescent girls' body image perceptions.

CONCLUSION

Steiner and Lock (1998) write, "to establish risks and causal models, any developmental model of eating disorders must account for the normal development of complex factors in multiple domains and their interaction" (p. 358). As prevention efforts are often implemented on a broad environmental level, research needs to include cultural, social, psychological, and biological variables to provide practical intervention guidance. Future studies should examine the effects of such factors as ethnic acculturation and peer group composition on the body image perceptions of adolescent females in multicultural settings. As these eating disorders and body image perceptions are "culture bound syndromes," much remains to be discovered about culture itself, and about young women's perceptions and behaviors within and across varying social contexts.

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