Personal identities and disordered eating behaviors in Mexican American women

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ABSTRACT

Eating disorder behaviors are prevalent in Latina populations. This study tested Schwartz's (2006) theoretical view that a broad array of personal identities serves as an internal resource during acculturation and prevents internalization of dysfunctional weight related beliefs. Sixty-six Mexican American women completed measures of personal identities, fat self-definition, eating disorder symptoms and acculturation. Results show that few positive and many negative personal identities predict higher eating disorder scores and effects are mediated through the fat self-definition. Characteristics of personal identities may influence internalization of cultural values related to weight. Interventions focused on overall identity may prevent eating disorders in Latinas.

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1. Introduction

Level of acculturation and strength of ethnic identity are considered important contributors to eating disorder (ED) symptoms in Latina populations (Alegria et al., 2007; Ayala et al., 2007; Cachelin, Phinney, Schug, & Striegel-Moore, 2006; Granillo et al., 2005; Miller & Pumariega, 2001). According to this perspective, acculturation leads to the internalization of Western values and ideals related to appearance and body weight which in turn contribute to body dissatisfaction, actual–ideal body image discrepancy and other attitudinal and behavioral correlates of the eating disorders (EDs). In contrast, lower levels of acculturation and high ethnic identity are viewed as protective factors, buffering against the reliance on values and ideals related to body weight as a key source of self-definition. However, inconsistent findings, methodological limitations, and the absence of clear mechanisms linking acculturation to behavior (Cummins, Simmons, & Zane, 2005) have led to calls for studies to address more complex and proximal sources of EDs in culturally diverse populations.

In this study we focus on personal identities as an important factor in the etiology of ED attitudes and behaviors and build on a recent theoretical proposition that characteristics of the array of personal identities are central to adaptive functioning during the process of acculturation (Schwartz, Montgomery, & Briones, 2006). Personal identities are a stable set of knowledge structures that reflect the values, interests and goals specific to the individual that distinguishes her from members of her social group (Schwartz, Zamboanga, & Weisskirch, 2008). They are shaped by opportunities and constraints afforded by the socio-cultural context. Positive identities are viewed as a protective resource that gives direction, meaning and constancy to everyday life, even during time of ethnic identity confusion and change. In contrast, negative personal identities are viewed as products of social, cultural and economic barriers that may increase stress and vulnerability to maladaptive outcomes.

We use self-schema theory to conceptualize characteristics of the total array of personal identities. Self-schemas are knowledge structures about the self in specific behavioral domains that are stored in long-term memory (Lieberman, 2003; Markus, 1977). Based on studies demonstrating the functional properties of self-schemas (Catrambone & Markus, 1987; Estabrooks & Courneya, 1997; Froming, Nasby, & McManus, 1998; Kendzierski & Sheffield, 2000; Lips, 1995; Markus, Hammill, & Sentis, 1987), and their organization in memory (Nowak, Vallacher, Tesser, & Borkowski, 2000) we hypothesize that Mexican American women who have few positive self-schemas, many negative self-schemas, and high interrelatedness among their self-schemas will lack the diverse array of interests, commitments, and strategies necessary to facilitate meaningful behaviors in a diverse array of domains. Simultaneously, they will be more likely to experience negative affects, behavioral avoidance and inhibitions that stem from negative self-schemas (Lips, 1995). Together these properties of the self-concept will increase vulnerability to cultural norms related to body weight and will contribute to the development

of a fat self-schema, which in turn, will predict ED attitudes and behaviors.

2. Methods

2.1. Participants

The sample included 66 Mexican American young adult women recruited with community-based flyers and announcements at university based Latina student organizations. Table 1 shows the sample characteristics.

2.2. Measures

The number of valenced self-schemas and interrelatedness were measured using an open-ended questionnaire developed by Zajonc (1960) and employing a methodology developed by Markus (1977) to identify self-schemas (see Corte & Stein, 2007 for description of methodology). Test–retest reliability over 12 months has been shown for the number of positive schemas, $r(94) = .53$, $p < .001$, number of negative schemas, $r(94) = .58$, $p < .001$, and interrelatedness, $r(94) = .66$, $p < .001$ (Stein & Corte, 2008).

The fat self-schema was measured with a single item (thin/fat) embedded in a closed-ended bipolar trait adjective rating scale. We previously showed validity and 12-month test–retest reliability of the measure as a dichotomous indicator of the fat self-schema, phi = .64, $p < .001$ (Stein & Corte, 2008).

The four ED outcomes included the body dissatisfaction, drive for thinness, and bulimia subscales of the Eating Disorders Inventory (EDI) (Garner, 1991) and the Binge Eating Scale (BES) (Gormally, Black, & Daston, 1982). Alpha coefficients in this sample were high (0.88, 0.85, 0.64, and 0.85 respectively).

Generational distance (Marin & Marin, 1991) was used as a proxy for level of acculturation. Women who were born in Mexico but living in the US were categorized as first generation; women born in the US with parents born in Mexico were categorized as second generation; and those who were born in US and parents were born in US were categorized as third generation or higher.

The 12-item Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992) was used to measure ethnic identity. The alpha coefficient in this study was 0.86.

2.3. Procedures

Data were collected in a single 2 h session. Measures were administered in a fixed order with the open-ended self-schemas administered first, followed by the closed-ended self-schema measure, acculturation and ethnic identity, and finally the EDI and BES questionnaires. Participants were weighed and measured using a balance beam scale after all questionnaires were completed. Compensation was $25.

2.4. Data analysis plan

A series of regression analyses were completed for each of the four outcome variables — EDI body dissatisfaction, EDI drive for thinness, EDI bulimia, and the binge eating score. The number of positive and negative self-schemas and interrelatedness were used to predict the dichotomous fat self-schema score (presence/absence) using logistic regression modeling. To control for differences in BMI, this variable was also included as a predictor. Linear regression modeling was used to test the significance of the four self-concept variables and BMI as predictors of each of the four dependent variables. To address the competing hypothesis related to the effects of acculturation and ethnic identity, two additional sets of analyses were completed. In the first set, generational status (0 = 1st or 2nd generation and 1 = 3rd generation or higher) was added as a predictor of both the fat self-schema and the ED outcome variables. In the second set, the MEIM score was added as a predictor of both the fat self-schema and the ED outcome variables.

3. Results

3.1. Influence of self-schema properties on ED attitudes and behaviors

Table 1 shows the descriptive statistics and bivariate correlations for all variables.

3.1.1. Fat self-schema

The number of positive self-schemas negatively predicted availability of the fat self-schema (Odds Ratio = 0.87, CI 0.76–1.00, $p = .05$) while the number of negative self-schemas (Odds Ratio = 1.65, CI 1.18–2.30, $p = .003$) and BMI (Odds Ratio = 1.20, CI 1.02–1.41, $p = .03$) positively predicted the fat self-schema. Interrelatedness was not a significant predictor (Odds Ratio = CI 0.10-1.57, CI 0.00–2.16, $p = .08$). Neither generational distance (Odds Ratio = 0.39, CI 0.98–1.57, $p = .19$) nor the MEIM score (Odds Ratio = 1.29, CI 0.35–4.82, $p = .71$) significantly predicted the fat self-schema controlling for BMI and the self-concept variables.

3.1.2. ED attitudes and behaviors

Table 2 shows the results of the regression analyses to predict the four outcome variables. Interrelatedness did not predict the fat self-schema, but it directly and positively predicted body dissatisfaction, bulimia and binge eating scores. Together with BMI, the four self-concept variables accounted for between 25% and 40% of the variance in the ED attitudes and behaviors variables.

Table 1
Sample characteristics, descriptive statistics, and bivariate correlations.

	Mean (SD)	Range
Age in years	24.1 (5.2)	18–40
BMI	25.7 (4.6)	16.7–40.5
Some college experience	97% ($n = 64$)	–
Total self-descriptors	25.3 (11.3)	7–52
Total self-schemas	17.0 (9.3)	4–47
Positive self-schemas	12.2 (6.9)	2–35
Negative self-schemas	1.6 (2.3)	0–9
Neutral self-schemas	3.3 (4.5)	0–28
Interrelatedness	0.17 (0.09)	0.02–0.40
Fat self-schema	27% ($n = 18$)	–
EDI bulimia	1.4 (2.2)	0–9
EDI body dissatisfaction	8.6 (6.8)	0–27
EDI drive for thinness	5.2 (5.2)	0–21
Binge eating scale	10.2 (6.8)	0–24
MEIM	3.3 (0.5)	2.2–4.0
Generational distance		
1st generation	17% ($n = 11$)	–
2nd generation	48% ($n = 32$)	–
≥3rd generation	35% ($n = 23$)	–

	EDI body dissatisfaction	EDI drive for thinness	EDI bulimia	Binge eating score
BMI	.26*	.04	.003	.12
# Positive self-schemas	−.25*	−.16	−.10	−.12
# Negative self-schemas	.32**	.35**	.34**	.34**
Interrelatedness	.15	.03	.16	.25*
Fat self-schema[a]	.55**	.50**	.37**	.42**

Note. *$p < .05$, **$p < 0.01$.
[a] Fat self-schema is a dichotomous variable, point-biserial correlations are reported.