Dying to Look Like You?: Race, Ethnic and Nativity Differences in Disordered Eating Behaviors among Adolescent Females

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The purpose of this paper is to document race, ethnic and nativity differences in disordered eating behaviors among adolescent females. A growing body of literature suggests that adolescents of color are at increased risk for developing eating disorders, behaviors previously believed to affect namely young, white females from relatively affluent families. However, these findings are based largely on data derived from small, community-based studies or qualitative research accounts. Data for this study come from the public-use National Longitudinal Study of Adolescent Health (Add Health), a nationally representative school-based study of the health-related behaviors of adolescents.[1] We measure differences among three outcomes: anorexic/bulimic symptomology, negative self-perception of body weight, and concern about weight loss. Preliminary findings suggest that across the three measures of disordered eating behaviors, there is wide variation among racial, ethnic, and nativity groups.

[1] We are currently in the process of obtaining approval for the Add Health restricted-use data, which will nearly double our analytic sample size.

INTRODUCTION

America's fat-phobia has produced a young society fixated on acquiring ideal standards of thinness. Studies report that 52 percent of adolescent girls have started dieting by the age of 14 (Neumark-Sztainer, 1995; National Eating Disorder Information Centre [NEDIC], 2005; Johnson, et al., 1984), while another estimates that 7.5 to 11 percent of adolescent females have used laxatives and/or have induced vomiting as means to lose or avoid gaining weight (Kann et al, 2000). According to the U.S. Department of Mental Health and Services (HHS) (2005), disordered eating behaviors are the third leading cause of death among American girls.

While historically seen as a behavior affecting white females from relatively affluent families, a number of studies have suggested that disordered eating behaviors are on the rise among adolescent girls of color (HHS, 2005; Fairburn & Brownell, 2002; Rodin, 1993). Theoretically-based arguments posit that pressure to "assimilate" to an American standard of beauty may be the cause of increased rates of disordered eating behaviors among Hispanics and Asians, while for African American girls, these behaviors have been attributed to upward mobility to the middle class (Granillo, Jones-Rodriquez, & Carvajal, 2005; HHS 2005; Fairburn & Brownell, 2002). However, these studies suffer from several methodological shortcomings, including the use of non-representative data (Abrams, Allen & Gray, 1993; Smith & Krejci, 1991), and inadequate measures of disordered eating behaviors (Granillo, Jones-Rodriquez, and Carvajal, 2005). Hence, we caution that these claims could be both alarmist and premature.

The purpose of this study is to examine race, ethnic, and nativity differences in disordered eating behaviors among adolescent females. Specifically, we determine

whether adolescents of color participate in disordered eating behaviors at similar or higher rates than their white counterparts. These behaviors are assessed net of age and parental socio-economic status (SES); we also assess these differences in relation to the body mass index (BMI) of adolescents and with attention given to the mental health of individuals. To our knowledge, only one study in this area has utilized nationally-representative data (Granillo, Jones-Rodriquez, and Carvajal, 2005), but not utilizing the range of outcome measures of disordered eating behaviors that we consider here.

METHODS

Data for this study are derived from Wave 1 of the public-use National Longitudinal Study of Adolescent Health (Add Health). Sponsored by the National Institute of Child Health and Human Development (NICHD) and 17 other federal agencies, Add Health is the largest, most comprehensive, nationally-representative survey of U.S. adolescents to date. Add Health was collected to examine how various social contexts –families, friends, peers, schools, neighborhoods, and communities - influence adolescents' health and risk behaviors. Its richness of measures allow us to utilize the following: 1) well-known and validated measures of disordered eating behaviors used in other self-report diagnostic instruments; and 2) measures of key covariates associated with disordered eating behaviors, including depression and self-esteem.

The public-use dataset contains information from one-half of the core sample, and one-half of the oversample of high SES African-American adolescents, all chosen at random. The total number of respondents in the dataset is 6,405. We first restrict the present study to females, given that very few males report problems with disordered eating behaviors; this eliminates roughly one-half of the overall cases. We also restrict

the analytic sample to the following racial/ethnic categories and nativity groups: non-Hispanic Whites, non-Hispanics Blacks, Asian-Americans, foreign-born Asians, Hispanics, and foreign-born Hispanics, creating a total analytic sample size of 2,999 respondents.

Dependent Variables:

The Add Health questionnaire covers a broad range of core cognitive and behavioral features associated with disordered eating. Many of the questions are similar to the criteria and diagnosis employed in various other well-known diagnostic instruments. We employ the following outcomes associated with disordered eating: 1) anorexic/bulimic symptomology; 2) negative self-perception of body weight; and 3) concern about weight loss.

Anorexic and/or Bulimic Symptomatology

We determine the presence of anorexic and/or bulimic symptomatology (AN/BN) by the respondent's answer to the following question: "During the past seven days, which of the following things did you do in order to lose weight or to keep from gaining weight?" To tap at this indicator of extreme weight control, we construct a binary variable: if respondents answered 'yes' to at least one of the four extreme measures ("made yourself vomit," "took diet pills," "took laxatives," and/or "other,"), they were coded "1". All other responses were coded "0".

Negative Self-perception

Body-dissatisfaction and body-image distortion have been found to result in an increased risk for developing a partial or serious eating disorder. Respondents were asked whether they perceive themselves as being "very underweight", "slightly underweight",

"about right", "slightly overweight", or "very overweight." In order to tap at this key indicator, we construct a binary variable to distinguish those who perceived themselves as being "very overweight" or "slightly overweight" (coded 1) to all other categories (coded 0).

Concern about Weight Loss

We rely on responses to two questions to tap a respondent's preoccupation with weight loss. Respondents were asked, "Are you trying to lose weight, gain weight, stay the same weight, or not trying to do anything about weight?" Those who responded 'yes' to 'lose weight' were also asked, "During the past seven days, which of the following things did you do in order to lose weight or to keep from gaining weight?" There were seven response categories to the second question including "dieted," "exercised," "made yourself vomit," "took diet pills," "took laxatives," "other," and "none." If respondents answered 'yes' to trying to lose weight, and 'yes' to either 'dieted' or 'exercised' as a means, we code them as "1". All other responses were coded "0".

Focal and Control Variables:

We include the following categories of race, ethnicity and nativity: non-Hispanic Whites, non-Hispanics Blacks, Asian-Americans, foreign-born Asians, Hispanics, and foreign-born Hispanics. We also include a set of controls for age, parental SES, body mass index (BMI), and measures of mental health (depression and self-esteem).

PRELIMINARY RESULTS

Preliminary results suggest wide variation among the three measures of disordered eating behaviors across the six racial, ethnic and nativity groups. On measures of extreme weight loss, roughly 8% of foreign-born Hispanics report having participated

in anorexic/bulimic behaviors within the past seven days, followed by native Hispanics at approximately 3%. This is followed by native Asians at roughly 3%. Roughly 2% of whites report having participated in behaviors of extreme weight loss, followed by less than 1% of blacks; no foreign-born Asians report such a behavior.

While whites report the highest percentage of negative self-perception of weight (approximately 68%), between 37-40% of all other racial and ethnic categories report sharing similar feelings towards their bodies.

Both native and foreign-born Asians report the highest percentage of concerns about weight loss (50% and 48%, respectively), followed by roughly 43% of whites. Native and foreign-born Hispanics report rates at roughly 42% and 40%, respectively. As with the other two measures, Blacks report the lowest with regard to concerns with weight loss, at roughly 36%.

NEXT STEPS

We will employ logistic regression modeling to more closely evaluate racial, ethnic and nativity differences on the three measures of disordered eating behaviors, net of the confounding effects of age, parental SES, body mass index (BMI), and measures of mental health (depression and self-esteem). Furthermore, we are currently in the process of obtaining approval for use of the Add Health restricted-use data, which will nearly double our analytic sample size.

Table 1: Percentage Distributions of Adolescent Females Behavior Regarding Weight Loss/Gain, Add Health, Wave 1 (1994).

Disordered Eating Symptoms	**White**	**Black**	**Hispanic, Native**	**Hispanic, Foreign Born**	**Asian, Native**	**Asian, Foreign Born**
Anorexic/Bulimic Behaviors **(n=45)**	1.53%	.89%	3.28%	8.33%	2.86%	0%
Negative Self-perception of Body Weight (**n=1183**)	67.46%	36.55%	38.52%	39.58%	40.00%	40.00%
Concerns with Weight Lose (**n=1229**)	42.57%	36.04%	41.80%	39.58%	50.00%	48.00%
n	**1959**	**788**	**122**	**48**	**70**	**50**