



## Eating Behaviors, Weight Bias, and Psychological Functioning in Multi-ethnic Low-income Adolescents



Rana Halabi Najjar, PhD, RN, CPNP<sup>a,\*</sup>, Eufemia Jacob, PhD, RN<sup>b</sup>, Lorraine Evangelista, PhD, RN, FAHA, FAAN<sup>c</sup>

<sup>a</sup> 345 N. Monmouth Ave, School of Nursing, Oregon Health and Science University, Monmouth, OR 97361, USA

<sup>b</sup> 5-942 Factor Building, School of Nursing, University of California Los Angeles, Los Angeles, CA 90095-1702, USA

<sup>c</sup> 299E Berk Hall, School of Nursing, University of California Irvine, Irvine, CA 92697, USA

### ARTICLE INFO

#### Article history:

Received 16 August 2017

Revised 10 November 2017

Accepted 11 November 2017

Available online xxxx

### ABSTRACT

**Purpose:** The purposes of this study were to: 1) Describe the incidence of disordered eating, weight bias, body dissatisfaction, and psychological distress, 2) Examine the relationship between sociodemographic variables (gender, ethnicity, and income) and disordered eating, weight bias, body dissatisfaction, and psychological distress in a sample of low-income adolescents.

**Design and Methods:** A cross-sectional study was conducted with 105 adolescents from low-income neighborhoods. Participants completed self-report questionnaires to assess eating behaviors, weight bias, body dissatisfaction, and psychological functioning. Height and weight were measured, and information on household income was collected.

**Results:** The participant's mean age was 16.31 ( $SD = 2.8$ ) years, 66% female, 47% Hispanic, and 46% African American. The mean annual income was \$17,018 ( $SD = 11,355$ ). Twenty-eight percent self-reported having some form of disordered eating, and 15% reported an eating disorder. The group with eating disorder reported the highest levels of weight bias ( $M = 93.4$ ,  $SD = 109.6$ ), body dissatisfaction ( $M = 94.6$ ,  $SD = 47.6$ ), and psychological distress ( $M = 1.4$ ,  $SD = 0.97$ ).

**Conclusion:** This study found a high prevalence of eating disorders with eating disorder participants experiencing the highest levels of weight bias and psychological distress. Future studies are needed to identify and evaluate community and school-based interventions to minimize weight bias and disordered eating.

**Practice Implications:** Nurses are at the forefront of healthcare and should collaborate with educators, school counselors, administrators, coaches, parents, and students, to address weight bias and disordered eating in schools by implementing school-based curriculum and policies.

© 2017 Elsevier Inc. All rights reserved.

Pediatric obesity is a major health threat in the U.S. The current rate of obesity in children ages 2 to 19 years is 17% with the highest prevalence among Black and Hispanic ethnic groups (Ogden, Carroll, Kit, & Flegal, 2014). Research has shown that unhealthy weight control behaviors are predictors for obesity (Neumark-Sztainer, Wall, Story, & Standish, 2012).

Unhealthy weight control behaviors, disordered eating, and body dissatisfaction are highly prevalent among adolescents (Ackard, Fulkerson, & Neumark-Sztainer, 2007; Eisenberg, Berge, Fulkerson, & Neumark-Sztainer, 2012; Neumark-Sztainer, Wall, Larson, Eisenberg, & Loth, 2011) placing them at a higher risk for psychological distress including depression, anxiety, and suicidal behavior (Ackard, Fulkerson, & Neumark-Sztainer, 2011; Crow, Eisenberg, Story, & Neumark-Sztainer,

2008; Stice, Hayward, Cameron, Killen, & Taylor, 2000). The high prevalence of disordered eating among adolescents has been shown to be predictive of obesity (Neumark-Sztainer et al., 2012) potentiating the progression towards a clinical eating disorder (Pearson et al., 2017; Stice, Marti, Shaw, & Jaconis, 2009; The McKnight Investigators, 2003). In fact, Stice et al. (2009) followed adolescents for an 8-year period and found that 12% of participants met the criteria for one or more eating disorders during adolescence.

Disordered eating or unhealthy weight control behaviors including dietary restraint, binge eating and purging behaviors, and misuse of laxatives and diuretics all fall under the DSM V category of "Other Specified Feeding or Eating Disorder" (DSM V, 2013). In some research studies disordered eating is referred to as subthreshold eating disorder (Ackard et al., 2011; Stice et al., 2009) and is often a pre-clinical symptom for full threshold eating disorder (Le Grange et al., 2014; Stice et al., 2009).

Another factor that may impact obesity and disordered eating is weight bias (WB). Despite increasing rates of obesity, obese individuals are experiencing increasing levels of stigma (Andreyeva, Puhl, &

\* Corresponding author at: Oregon Health & Science University, School of Nursing, 345 N. Monmouth Ave, Monmouth, OR 97361, USA.

E-mail addresses: najjar@ohsu.edu (R.H. Najjar), ejacob@sonnet.ucla.edu (E. Jacob), levangelista@uci.edu (L. Evangelista).

Brownell, 2008; Latner & Stunkard, 2003). Higher levels of WB are associated with unhealthy coping strategies, such as eating more food (Puhl et al., 2017; Puhl & Brownell, 2006), higher body mass index (BMI; Myers & Rosen, 1999; Mamun, O'Callaghan, Williams, & Najman, 2013; Neumark-Sztainer et al., 2007; Takizawa, Danese, Maughan, & Arseneault, 2015), body dissatisfaction, and lower psychosocial functioning (Annis, Cash, & Hrabosky, 2004; Bucchianeri, Eisenberg, Wall, Piran, & Neumark-Sztainer, 2014). Additionally, obese individuals experiencing WB are at increased risk for depression and other mental health disorders (Bucchianeri et al., 2014; Friedman et al., 2005).

Although research regarding the relationship of WB, disordered eating, and psychological distress exists, very few data comes from ethnically and culturally diverse populations and virtually none from low-income adolescents, who are at the highest risk for being obese. The overrepresentation of Caucasian youth from middle and upper socioeconomic strata in most weight-based studies makes it difficult to draw conclusions about ethnic and socioeconomic differences. The few studies conducted with ethnically diverse populations have shown conflicting results with disordered eating, eating disorders, and WB. One study found that binge eating disorder was more common in African American than Caucasian women (Striegel-Moore, Wilfley, Pike, Dohm, & Fairburn, 2000). Another study found a higher prevalence of WB among minorities, particularly African Americans (Puhl, Andreyeva, & Brownell, 2008). Conversely, Almeida, Savoy, and Boxer (2011) found lower rates of WB and binge eating risk factors among African Americans compared to their Caucasian and Latino counterparts. When examining eating disorders in a diverse low-income sample of college students, another research group found lower rates of eating disorders in African Americans and Caucasians compared to Latinos (Gentile, Raghavan, Rajah, & Gates, 2007). Rodgers, Watts, Austin, Haines, and Neumark-Sztainer (2017) evaluated ethnic/racial differences with disordered eating in a diverse overweight sample and found limited differences between Asian, White, Black, and Hispanic adolescents. Only one group of researchers examined WB in an ethnically diverse and disadvantaged youth population; however, they explored BMI and weight gain related to WB and not eating behaviors and psychological distress. Also, the analysis from the study focused on gender and not ethnic differences with data from only one school, limiting the generalizability of the findings (Feeg, Candelaria, Krenitsky-Korn, & Vessey, 2014). To our knowledge, no studies have been conducted explicitly focusing on multi-ethnic low-income adolescents examining eating behaviors, weight bias, and psychological functioning with both a non-overweight and overweight sample. With obesity rates highest for multi-ethnic and low-income adolescents (Babey, Hastert, Wolstein, & Diamant, 2010; Barlow, 2007; Hastert, Babey, Diamant, & Brown, 2008; Singh, Siahpush, & Kogan, 2010), efforts to improve our understanding of eating behaviors, WB, and psychological distress in this population are warranted. Only by elucidating the correlations of these variables can effective multidisciplinary and multi-ethnic interventions be designed.

## Purpose

The purposes of this study were to

- 1) Describe the incidence of disordered eating, WB, body dissatisfaction, and psychological distress in a sample of multi-ethnic low-income adolescents.
- 2) Examine the relationship between sociodemographic variables (gender, ethnicity, and income) and disordered eating, WB, body dissatisfaction, and psychological distress in a sample of low-income adolescents.

We predict that participants reporting more disordered eating will have higher levels of WB and psychological distress. We also hypothesize that girls and African Americans in our sample will experience more disordered eating and WB.

## Design and Methods

A cross-sectional study design was utilized, and study participants were enrolled from low-income neighborhoods in a major metropolitan city in the Western U.S. Participants were eligible if they were between 13 and 19 years of age and able to read, write, and speak English. The study was approved by the appropriate Institutional Review Board. Sampling bias was minimized by recruiting participants from the community instead of participants who were seeking treatment.

The sample was recruited outside libraries and community centers frequented by adolescents in low-income neighborhoods. The study was explained to each parent and adolescent individually who approached the investigator indicating interest in participating in the study. After informed consent was obtained from the parent and assent from adolescents <18 (adolescents ≥18 years consented without their parents), the participants were screened for eligibility. Of the 109 that consented to participate, 2 were excluded because they were pregnant, and 2 changed their minds. Large tables with chairs and corrugated dividers were set up for privacy where participants filled out the questionnaires. Participants completed self-report questionnaires to assess eating behaviors, WB, body dissatisfaction and psychological functioning; average time for questionnaire completion was 25–30 min. Four participants had challenges understanding how to proceed through the eating behavior questionnaire and needed guidance from the researcher. Demographic information collected included age, gender, grade, ethnic background, and employment. Household income was collected from the parent or participant at the time consent was obtained. The researcher or trained data collectors measured height to the nearest centimeter and weight to the nearest tenth of a kilogram. Participants were asked to remove their jackets, shoes, hats, and removable hair accessories before being weighed and measured. Height was obtained using a portable stadiometer, and weight was measured with a digital scale (Model BG17; Beurer body analysis scale, Hallandale Beach, FL) which was zero balanced before each participant was weighed. To provide privacy participants were weighed behind a 4 panel folding screen room divider.

## Measures

### Disordered Eating

Eating behaviors were measured using the adolescent version of the Questionnaire of Eating and Weight Patterns (QWEP-A). The QWEP-A was adapted from the adult Questionnaire on Eating and Weight Patterns-Revised (QWEP; Spitzer et al., 1993) by using simpler words to ensure adequate understanding in the adolescent population. Psychometric properties of the QWEP-A have shown moderate stability, adequate predictive proficiency, and concurrent validity (W.G. Johnson, Grieve, Adams, & Sandy, 1999; Johnson, Kirk, & Reed, 2001). In addition, test-retest results revealed significant levels of stability (Johnson et al., 2001).

The 12-item self-report measure classifies participants into several categories including no diagnosis, episodic overeating, binge eating, binge eating syndrome, binge eating disorder, and possible bulimia. Differentiation between these categories depended on whether the participant reported loss of control, distress, and frequency of binges per week. As with previous studies, participants were categorized into one of three eating behavior groups. The first group was no diagnosis; the second was nonclinical bingeing which included episodic overeating, binge eating, and binge eating syndrome; the third group was eating disorders which included binge eating disorder and possible bulimia. The symptoms of the nonclinical bingeing category were similar to subthreshold eating disorder or disordered eating.

### Stigmatizing Experiences

Weight bias was assessed using the Stigmatizing Situations Inventory-Adolescents (SSI-A) which is a revised version of the Stigmatizing Situations Inventory (SSI) adapted for adolescents. Myers and Rosen (1999)

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات