THE INFLUENCE OF CULTURE AND ACCULTURATION ON BINGE EATING DISORDER SYMPTOMS IN LATINA WOMEN

by

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ABSTRACT

ALYSSA MARIE VELA. The influence of culture and acculturation on binge eating disorder symptoms in Latina women. (Under the direction of DR. FARY CACHELIN)

The goal of this study was to gain an improved understanding of binge eating disorder (BED) in Latina women by creating a rich description of their symptoms and related experiences, while also considering the influence of culture and acculturation. This research is important because empirical literature indicates that Latinas are under-diagnosed and under-treated for BED and to date, there are no published studies examining individuals' self-reported symptoms and experiences. The current study created a picture of BED in Latinas by examining demographic and psychological variables such as distress and depression, as well as participants' self-reports of what they eat during a binge, the setting in which their binges occur, and their experience of loss of control. To consider potential influences of culture and acculturation, characteristics were compared between English-speaking Latina women, Spanish-speaking Latina women and English-speaking White women. The current study found that Latina women are very similar to White women across the demographic and psychological variables, as well as in their experience of loss of control. However, the Latina women were descriptively different in the foods consumed during binges and the settings in which they binge. The major finding from the current study was that Latina women tend to binge on foods such as chicken in the context of normal family meals, while White women tend to binge on snack foods such as pretzels, alone, at night. The implications of this study may be useful in improving culturally appropriate diagnosis and treatments of BED for Latinas.

DEDICATION

I would like to dedicate this thesis to my family, my parents—Jaime and Marie Vela—for constantly supporting me in my academic pursuits and encouraging me daily, even at a distance. To my sisters—Julia and Natalie, knowing that you look up to me inspires me to keep working harder to achieve my goals. Finally, this process would have been exponentially more challenging without the love, support and guidance of Joe Rodgers. Going through this process at the same time, and seeing you complete each milestone motivated me to keep working even on the most challenging of days.

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LIST OF ABBREVIATIONS

BED	binge eating disorder
OBE	objective binge episode
SBE	subjective binge episode
LOC	loss of control
EDE	Eating Disorder Examination
WHP	Women's Health Project

CHAPTER 1: INTRODUCTION

This study aims to examine binge eating disorder symptoms in Latinas. The goal of this research is to gain a better understanding of eating disorders within this population, and to create a descriptive picture of binge eating disorder (BED), while considering the influences of culture and acculturation on the presentation of symptoms. Gaining a more culturally relevant picture of BED in this population is important because it is thought to be a particularly prevalent and potentially harmful disorder among Latinas (Kessler et al., 2012). The patterns and characteristics of binge eating disorders in Latinas will be considered from a cultural perspective, as well as compared to the research literature, in which the primary population studied is White women. The term Latina, as it will be used throughout this paper, is used to broadly describe women who self-identify as having origin or lineage in a country in Central or South America, Mexico, Spain or Portugal.

In an effort to provide background for this research, this manuscript will include four Chapters. Chapter one contains a brief review of the current research literature on the presentation of binge eating disorders and their associated symptoms in Latina women, as well as in White women. The background information seeks to illustrate the importance of this research, and the necessity of an improved understanding of the experience of eating disorders in Latinas to inform future diagnosis and treatment of BED. Chapter two focuses on the methods that were used in this study and it begins with

a discussion of The Women's Health Project, from which the data were derived, followed by a detailed explanation of the quantitative and qualitative methods that were employed to address the research questions. Chapter three provides the results of the study and the fourth chapter includes a discussion of the results, implications of the research, strengths and limitations, and future directions for this research.

While the majority of studies dedicated to eating disorder research have been conducted with White women, eating disorder research specific to minority populations has many gaps. The purpose of this study is to expand the literature and provide a more complete picture of Binge Eating Disorder (BED) in Latina women and to gain an understanding of how culture and acculturation are related to the expression of such binge eating disorder symptoms.

The National Institute for Mental Health (NIMH) states its mission is to "reduce the public health burden of mental and behavioral disorders through research. Eating disorders represent a significant fraction of this burden" (Chavez & Insel, 2007). The Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition- Text Revision (DSM-IV-TR, APA 2000) includes classifications of eating disorders including Anorexia Nervosa (AN), Bulimia Nervosa (BN), and Eating Disorder Not Otherwise Specified (EDNOS), which includes the diagnosis of Binge Eating Disorder (BED). BED is characterized by recurrent episodes of binge eating without the regular use of compensatory behavior (APA, 2000). Binge eating is defined as the consumption of a large amount of food while experiencing a loss of control over eating: this is known as an objective bulimic episode (OBE; Fairburn & Cooper, 1993). The intake of a smaller amount of food can also be accompanied by a sense of loss of control; such an episode is

referred to as a subjective bulimic episode (SBE; Fairburn & Cooper, 1993). OBEs and SBEs are equally important to general psychopathology of eating disorder symptoms (Latner et al., 2007). Additionally, increased numbers of bulimic episodes (OBEs and SBEs) are directly associated with lower quality of life (Latner et al., 2008).

It is also important to note that Binge Eating Disorder was recently classified as a distinct disorder in the DSM-5 (APA, 2013). The key features which characterize a binge episode are (1) eating within a discrete period of time an amount of food that is much more than what most others would eat under similar circumstances; and (2) a subjective experience of loss of control over eating (APA, 2000). BED is now defined as engaging in the two key features, while experiencing marked distress, on average at least once weekly over three months and was recognized as an independent disorder with the intention of increasing awareness of the "substantial differences between binge eating disorder and the phenomenon of overeating" (APA, 2013).

Research has indicated that the effects of eating disorders are far reaching. Samples with high levels of psychopathology, both eating-related and general, report a lower quality of life than the general population (Latner et al., 2008). Data from the World Mental Health Organization surveys provide strong evidence supporting the clinical importance of BED within the overall context of public health (Kessler et al. 2012). The World Health Organization concluded that BED is as much of a public health problem as bulimia nervosa (BN; Kessler et al., 2012).

Latner, Vallance, and Buckett's (2008) research on eating disorders in White women demonstrates that both OBEs and SBEs are closely tied to eating pathology, as well as general psychopathology. The similarity between types of binge episodes is

important to note since the experience of an OBE and a SBE, is a sense of loss of control. SBEs were found to be especially impairing, particularly when paired with compensatory behaviors (i.e. vomiting, laxative use, diuretic use), because they are more difficult to treat than OBEs (Latner et al., 2008). There is no definitive research as to why SBEs are more difficult to treat than OBEs, however, the difficulty in treatment may be related to the more recurrent and frequent nature of SBEs (Mond, 2006). The experience of either type of binge episode has been demonstrated at a clinical level to have a negative effect on quality of life. It should also be noted that individuals who binge eat tend to experience both OBEs and SBEs (Latner et al., 2008).

There is little data available describing the experience of a binge and what a binge episode entails for individual women. However, it is known that the length of time in which binge episodes occur can range from a few hours of eating to constant food consumption throughout the day (Wertheim & Weiss, 1989). Regardless of the length of a binge, an important criterion of BED to consider is the experience of distress. Grilo and White (2011) concluded that participants with BED who experienced significant levels of distress also experienced greater eating pathology (i.e. eating when not hungry and associated feelings of shame and guilt) and depression, and that the inclusion of the distress criterion is important for diagnosis. Research also indicates that eating-related distress is distinct and not merely a symptom of depression (Grilo & White, 2011).

Many women report distress not only related to eating, but also to compensatory behaviors which often result in feelings of shame or guilt (Berg et al., 2013). These behaviors are thought to be associated with drive for thinness in White-American culture (Fernandez & Prichard, 2012). Research indicates that the media influences society’s

opinions about body size, and thus many White women strive to achieve the media's ideal thin body type. In fact, exposure to media models was found to be the number-one predictor of drive for thinness in women, with a sense of social pressure to be thin as the second strongest predictor (Fernandez & Prichard, 2012). However, media influence is just one important factor in the prevalence of binge eating.

In light of the emphasis American media places upon body type, White-American women's drive for thinness and related experience of distress, and guilt over binge eating can be better understood as part of the culture. The experience of distress and guilt in response to the loss of control during a binge episode is particularly important in diagnosis and relevant for treatment (Berg et al., 2013). The significant extent to which eating disorder research has been conducted with White women indicates the importance of this area of research and that it is important to achieve the same level of understanding of BED in other ethnic groups.

1.2 Binge Eating Disorder in Latinas

Currently, little information exists describing the experience of eating disorders, and associated psychopathology in Latinas, although prevalence in this population is relatively high. Across a range of countries, BED was found to be more common than BN in Latinas, and almost equally as persistent, comorbid, and impairing (Kessler et al. 2012). Alegria et al. (2007) state that several studies have indicated rates of eating disorder symptoms in Latinas as equal to, or higher, than rates reported by White women in the United States. For example, in one multi-ethnic study on eating disorders, Latinas indicated that binge eating episodes caused greater distress than any other symptoms assessed (Franko, Becker, Thomas, & Herzog, 2007). This health concern is particularly

important since the Latino population is the fastest growing ethnic minority group in the United States (Lees & Tinsley, 1998). The general lack of understanding of the pathology of eating disorders in Latinas is consistent with a deficit in identification of eating disorders and treatment for this growing population. To the extent that BED is associated with obesity, binge eating in Latinas is even a greater concern. However, we do know that eating disorders, and BED in particular do occur in Latina women and that they are underdiagnosed and undertreated.

Over the past several decades of research, it has been made increasingly evident that eating disorders, binge eating in particular, occur within the Latina population. There has also been some evidence that the experience and expression of eating disorders is influenced by cultural values and norms. Gaining a better understanding of how typical Latina values and norms influence habits of eating, views of attractiveness, and recognition of disorder would likely allow for more culturally specific diagnosis and treatment. To seek greater understanding, we must consider what is already known about the experience of BED in Latinas.

Latinas are more likely to be overweight or obese than women of other ethnic groups (Yeh, Viladrich, Brunning, & Roye, 2009). The prevalence of overweight and obesity in Latinas is important because research indicates that it is more socially acceptable and attractive in this group to be overweight, unlike White body size norms (Cachelin, Monreal, & Juarez, 2006).

The drive for thinness, and level of body dissatisfaction typically reported by White women and associated with eating pathology, may thus be less common for Latinas. However, acculturation may account for an increased number of women to shift

from idealizing a more curvy Latina body type to a thinner White-American body type. This shift is likely related to the American push for thinness and Latinas adjusting to such body size conceptions with increased exposure to American media (Warren et al., 2005). Cachelin et al. (2000) found that Latinas who had experienced more acculturation also reported greater disordered eating. Additionally, research has indicated that women who spend more time living in the United States, and have more greatly adapted to American culture are at greater risk for an eating disorder (Alegria et al., 2007).

Though the research literature recognizes that eating disorders do occur in Latinas, and that as they spend more time in the United States and increasingly adapt to European-American culture and body-image standards they are at increased risk for an eating disorder, little is known about the experience of eating disorders in Latinas. Specifically, the research literature is lacking information about the Latina experience of binge eating and occurrence of OBEs and SBEs, as well as distress, restraint or drive for thinness, and a sense of loss of control associated with overeating. An improved understanding of each of these variables will help to create a descriptive picture of eating disorder pathology in Latinas, and to inform diagnosis and treatment-hence, the importance of this study described below.

In the past, the general belief was that ethnic minorities rarely experienced eating disorders; however, research has indicated this belief likely stems from an underrepresentation of minorities in clinical research (Cachelin, Veisel, Barzegarnazari, & Streigel-Moore, 2000). Despite an improved understanding that eating disorders do exist in ethnic minority populations, Latinas are less likely to self-identify symptoms of disordered eating, and are also less likely to have an eating disorder identified by a

medical professional (Franko et al., 2007). Research has indicated that doctors are less likely to ask the appropriate questions to diagnose an eating disorder in ethnic minorities. Doctors are also less likely to refer ethnic minorities to other health care provides for eating disorder treatment (Franko et al., 2007). Limited recognition of symptoms may be related to medical workers' expectations of prevalence and symptom presentation in ethnic minorities. However, lack of recognition may also be related to Latina's low to moderate level of self-reported distress, and limited help-seeking behaviors (Franko et al., 2007). Furthermore, Latinas' hesitation to seek treatment may be related to a number of barriers, including the experience of shame, and language concerns (Cachelin et al., 2000).

The lack of recognition of eating disorder symptoms in Latina women indicates that criteria to assess eating disorders may not appropriately allow for an understanding of eating disorder pathology in Latinas. This lack of recognition may be especially true for Latinas with low levels of acculturation, and are thus distinct from the expected presentation of symptoms (Alegria et al., 2007). Acculturation refers to the gradual process of adaption to the characteristics of living in a new culture, this can occur to varied degrees (Morales et al., 2001). Acculturation may be related to a shift in Latina women's experience and expression of eating disorder symptoms. With greater acculturation Latina women may shift towards the common White presentation of eating disorders, including a desire to be thin, as well as shame and guilt about eating. Yet, many Latina women in the United States who have low levels of acculturation do not express the typical symptoms associated with eating disorders in White women and may be more likely to experience barriers to diagnosis and treatment (Franko et al., 2007).

Several barriers to diagnosis and treatment of eating disorders are hypothesized to be particularly relevant to Latinas, including: a lack of clinically relevant research, limited recognition of disorder-related symptoms by individuals and medical professionals, and the experience or expression of different symptoms than are clinically assessed. Thus, research is needed that examines the influences of culture and acculturation on symptom expression in Latina women. An improved understanding of how culture influences symptom expression may be useful to inform appropriate recognition of symptoms and treatment.

1.3 Purpose of the Current Study

This study aims to assess the similarities and differences in eating disorder symptoms among English-speaking Latina research participants and Spanish-Speaking Latina participants, with a comparison to White women from the existing research literature and from unpublished data. The study will examine the following:

R1. What is the manifestation of binge eating disorder symptoms in Latinas?

R2. Is there variation in the descriptions of BED experiences and symptoms among English- speaking Latina women, Spanish-speaking Latina women, and White women?

R3. How do women of each group describe overeating, and how do those explanations differ thematically?

CHAPTER 2: METHODOLOGY

The following section describes the Women's Health Project (WHP) study from which the data were derived. Latinas from two large urban areas who reported regular overeating during the past three months were included in this study. Participants were organized into two groups, English-speaking Latina women who were assumed to have undergone less acculturation and Spanish-speaking Latina women who were assumed to have undergone more acculturation. These two groups were created in order to compare the variables in question based on presumed acculturation. Both quantitative and qualitative analyses were used to gain an understanding of how the two groups reported eating disorder and psychological variables. Additionally, quantitative data was compared to data from three studies on White women from the existing research literature. The qualitative data was compared to a subset of unpublished data from the New England Women's Health Project that was conducted with White female participants recruited from the community via calls from a consumer data base and advertising (Pike et al., 2006). The DSM-IV-TR diagnostic criteria for BED were used in the comparison studies (Franko, Becker, Thomas, & Herzog, 2007; Masheb & Grilo, 2005; Streigel-Moore et al., 2010) included in the current study and the New England Women's Health Project; the WHP used the current DSM-V diagnostic criteria for BED.

2.1 Women's Health Project Methodology

After responding to recruitment flyers, participants completed a brief screening questionnaire by phone to determine study eligibility. The screening included the inclusion and exclusion criteria, ethnicity and/or country of origin, and amount of food consumed during a typical binge episode. Participants were also asked to report level of education, occupation, and height and weight, which was used to calculate BMI. Participants who were determined eligible after completing the EDE and self-report questionnaires were randomly assigned to the intervention or waitlist conditions. Women who were assigned to the waitlist condition were invited to participate in the intervention after completion of the required waitlist period. For the purpose of this study, only baseline data prior to randomization for all eligible participants who met qualifications for BED will be used and discussed.

2.2 Assessments

Demographic Information: Age, date of birth, country of origin, ethnicity, height, and weight were collected via self-report.

Body mass index (BMI): A measure indicating underweight, normal weight, overweight or obese. Calculated using self-reported height and weight by dividing weight in pounds by height in inches and multiplying by 703.

Eating disorder symptoms: The Eating Disorder Examination, 12th Edition (EDE; Fairburn & Cooper, 1993) is a well-established, standardized, investigator-based interview that measures the frequency and severity of overeating over the course of the past three and six months. The EDE also evaluates related constructs including use of compensatory behaviors, degree of dietary restriction, level of distress concerning

overeating, and the importance of weight and shape. The EDE has demonstrated high discriminate and concurrent validity and reliability (Rizvi, Pterson, Crown & Agras, 2000). The Spanish translation of the EDE has also demonstrated acceptable validity and reliability (Escursell, Girla, & Clarasó, 2000). The EDE-Q is an alternative to the EDE; it is a less time consuming self-report measure that like the EDE assesses eating disorder pathology. The EDE-Q has been demonstrated to be reliable and valid; in particular the EDE-Q has demonstrated good discriminate validity (Aardoom, Dingemans, Slof Op't Landt, & Van Furth, 2012). The EDE uses a variety of probe questions to invite participants to share OBEs over the past month in which they consumed a large amount of food and experienced a sense of loss of control. The initial probe is "different people mean different things by overeating. I would like you to describe any times that you have felt that you have eaten too much at one time" (Fairburn & Cooper, 2003). The participant is given time to respond and then the interviewer follows up with subsidiary probes to gain greater detail about the food eaten, the amount of food eaten, when the eating began and ended, the social context during eating, and the experience of loss of control. Similarly, to gain examples of SBEs from participants, the interviewer uses an initial probe, "Have there been any times you have felt that you have eaten too much, but others might not agree? For example, have there been any times when you had a small or smaller amount of food with a sense of loss of control" (Fairburn & Cooper, 2003). The responses provided by participants are recorded verbatim on a score sheet for documentation. (Refer to Appendix A.)

Importance of Shape and Weight: On the EDE a reported score of "1" when asked about the importance of one's shape or weight indicates that shape or weight is of little

importance in one's self-evaluation, a score of "4" indicates moderate importance and "definitely one of the main aspects of self-evaluation," while a "6" would indicate that shape is of extreme importance and "nothing is more important in the subject's scheme of self-evaluation" (Fairburn & Cooper, 1993).

Depressive Symptoms: The Beck Depression Inventory, 2nd ed. (BDI-II; Beck, Steer, & Brown, 1986) is a self-report measure of depressive symptoms that has demonstrated good discriminate and concurrent validity and reliability in both English and Spanish (Beck, Steer, & Brown, 1986). The BDI-II is scored based on the number and level of responses endorsed by the participant. Each statement provides a number of response options that indicate minimal, mild, moderate or severe depression. The lowest score on the BDI-II, an overall score of below 13 indicates minimal depression, a range of 14 to 19 indicates mild depression, 20-28 indicates moderate depression, and 29 to 63 indicates severe depression in a non-clinical population.

2.3 Participants

Latinas ages 18 to 55,who indicated regular overeating with a sense of loss of control during the past three months, were recruited from Los Angeles, CA (n=49) and Charlotte, NC (n=36). All participants from Los Angeles self-identified as Mexican-Americans, while over 75% of the Charlotte sample also self-identified as Mexican-American, there was one participant from each of the following countries: Guatemala, Brazil, Puerto Rico, Cuba, Honduras, and Nicaragua. Participants were recruited via English and Spanish flyers posted and distributed at approved on-campus and community locations throughout both cities. Exclusion criteria included: current pregnancy, brain injury or impairment affecting recall or ability to complete assessments, serious medical

conditions, serious medical conditions or risk for hospitalization, and current treatment for an eating disorder. Excluded participants were referred for appropriate external treatment.

2.4 Quantitative Analysis

To better understand the cultural variation of eating disorder symptoms, participants were divided into two groups, English-speaking Latina women who were assumed to have experienced greater acculturation and Spanish-speaking Latina women who were assumed to have experienced less acculturation. These two groups were compared to data on White women from three existing research studies (Franko, Becker, Thomas, & Herzog, 2007; Masheb & Grilo, 2005; Streigel-Moore et al., 2010). The comparison studies were selected because they included the greatest number of variables in common with the current study and were conducted with populations of predominately White women either on a university campus or in the community. Variables for comparison included demographics (age, BMI, level of education), OBEs, SBEs, loss of control (LOC), concern about weight, concern about shape, distress, and depression. Frequencies (means, standard deviations, percentages) were used to characterize the two groups of Latinas. The quantitative analysis was used to frame the qualitative analysis.

2.5 Qualitative Analysis

The EDEs completed by participants from the WHP were used to examine Latina participants' descriptions of OBEs, SBEs, and LOC. The analysis also considered participants' reports of what they eat, when they eat, the setting in which they eat, and the social context in which they eat. The goal was to create an interpretation of participant's experiences and to organize that information into meaningful categories. A two-person

coding team analyzed the data extracted from the EDEs. The analysis was conducted using the qualitative data analysis software system NVivo 10. Spanish responses were translated to English prior to analysis. The same process was used for unpublished data from the New England Women's Health Project (1996), which was conducted with English-speaking White women. The coding team listened to 5 EDEs from the New England Women's Health Project recorded on tapes and transcribed participant's responses for inclusion in the study. The themes extracted were then compared across the three groups.

Coder 1 was a female in her early 20s in the process of completing her master's degree in Clinical Psychology. She self-identified as Latina and grew up in a household with one Spanish-speaking parent and speaks Spanish herself. Coder 2 was a 19 year-old female who completed her junior year of college during this project and is majoring in Biology and Psychology. She was born in Nepal and moved to the United States at age 9. She self-identifies as Nepalese or Asian.

The coders manually entered all of the data from the EDEs into a spreadsheet, including the data translated from Spanish, and the transcribed EDE tapes. The coder who did not enter the data was responsible for checking the entry completed by the other coder, any discrepancies were discussed and the original EDE was referenced for clarification. The spreadsheet was then uploaded into NVivo, where each coder had access to the data to search for and identify themes. Each coder spent significant amounts of time reviewing the data in NVivo, creating nodes (categories) and identifying patterns through the creation of word trees, the identification of the most commonly used words, and word queries. The coders each created general categories based on the variables in

question and explored themes within each. After each coder had independently worked with the data, the themes identified were compared and those that were identified by both coders and agreed on were included in the results of this study.

CHAPTER 3: RESULTS

3.1 Quantitative Analysis Results

A comparison of each group's average reported age, level of education, BMI, shape concern, weight concern, distress regarding binge eating and depression level was performed using means and standard deviations. Table 1 displays the means and standard deviations for each group, as well as those from three published studies (Franko, Becker, Thomas, & Herzog, 2007; Masheb & Grilo, 2005; Streigel-Moore et al., 2010) with primarily White female participants.

Table 1: Demographics and BED characteristics across groups

	English-speaking Latinas: Charlotte (N=21)	English-speaking Latinas: LA (N=51)	Spanish-speaking Latinas: Charlotte (N=4)	English-speaking Latinas: All (N=72)	Franko et al. (2007) (N=4652)	Masheb & Grilo (2006) (N=173)	Streigel-Moore (2010) (N=64)
Age	26.0 (9.04)	26.39 (6.97)	33.25 (13.42)	28.06 (7.77)	23.90 (9.20)		36.64 (7.92)
Gender (% Female)	100.00	100.00	100.00	100.00	87.8		92.2
BMI	34.89 (9.73)	28.39 (6.97)	41.86 (10.76)	32.55 (8.07)	23.70 (5.70)	37.90 (5.60)	30.88 (6.71)
Education Level^	83.4	86.3	25.00	84.70			79.2
Distress*	3.05 (1.93)	3.84 (0.79)	3.75 (0.50)	3.61 (1.80)	1.91 (2.31)		
Shape Concern	3.42 (1.96)*	4.43 (1.33)*	4.50 (1.29)*	4.13 (1.59)*		26.5 (7.4)*	4.67 (0.94)**
Weight Concern	3.10 (1.97)*	4.06 (1.37)*	4.00 (1.63)*	3.78 (1.62)*		16.3 (4.6)*	4.1 (1.81)**
Depression (BDI)	10.20 (15.50)	17.11 (13.68)	8.00 (0.00)	15.22 (14.39)			18.63 (8.32)
# Days OBE past 30 days	8.00 (12.05)	7.81 (9.20)	18.75 (2.68)	10.64 (9.39)			
#Days SBE past 30 days	7.56 (11.09)	4.14 (7.35)	1.00 (2.00)	5.63 (8.60)			

Note: Standard deviations appear in parentheses below means. Only some participants in this study completed the EDE-Q.
*EDE **EDE-Q ^^TFEQ ^Percent completed some college or more
Distress: 1=not at all, 2=slightly, 3=moderately, 4=greatly, 5=extremely

In this section distinctions will be made between the English-speaking Latina participants from Charlotte and Los Angeles, as well as the Spanish-speaking participants from Charlotte to account for potentially important cultural and regional differences between these two groups. The English-speaking Latina participants from Los Angeles may have experienced a greater deal of acculturation, as they are likely more integrated into their greater society than are Latinas in the Charlotte sample. A large portion of the

English-speaking Latina participants from the current study were highly educated and had completed at least some college, while the Spanish-speaking participants from Charlotte demonstrated the lowest level of education across the groups. Across the groups from the current study the mean age was consistently in the 20s and 30s. The participants from Charlotte had a higher average BMI (*M*=34.89, *SD*=9.73) than those from LA (*M*=28.39, *SD*=6.97). The Spanish-speaking Latinas from Charlotte demonstrated the highest BMI across the groups (*M*=41.86, *SD*=10.76). The Spanish-speaking Latinas also reported the greatest number of days over the past 30 with an OBE. Interestingly, the number of OBEs reported by Spanish-speaking Latinas was relatively high (*M*=18.75 *SD*=2.68), however the number of SBEs reported was minimal (*M*=1.00, *SD*=2.00).

The Spanish-speaking Latinas reported the highest concern about shape of the groups from the current study (*M*=4.50, *SD*=1.29). The Latinas from Los Angeles reported greater concern about their weight (*M*=4.06, *SD*=1.37) than did the participants from Charlotte (*M*=3.10 *SD*=1.97), however both groups indicated their weight is of moderate importance to their self -image. These scores indicate that participants, on average, reported that their shape and weight are of moderate importance and major aspects of their self-evaluation.

Each group from the current study reported at least a moderate level of distress about binge episodes (3.0= moderate, 4.0= great distress). This measure of distress is based upon the DSM-IV appendix (Fairburn & Cooper, 1993). The Latinas from Los Angeles reported, on average, mild depression on the BDI (*M*=17.11, *SD*=13.68). The

Spanish-speaking Latina participants reported, on average, minimal depression on the BDI (*M*=8.00, *SD*=0.00).

3.2 Food Types

Among the English-speaking Latinas the most commonly reported foods consumed were: chicken, cheese, and rice, as listed in table 2. Refer to Appendix B for word plot of most frequently used terms by participants.

Table 2: Most commonly reported binge foods by English-speaking Latinas

	Times reported	% Reported	Reported by
Chicken	16.00	55.55	5001, 5003, 5010, 5013, 5014, 5021, 5035, 5047, 5037
Cheese	14.00	50.00	5002, 5003, 5007, 5010, 5021, 5030, 5035, 5047
Rice	9.00	50.00	5002, 5003, 5007, 5010, 5011, 5014, 5021, 5022, 5047

English-speaking Latinas only reported chicken in an OBE, and not in an SBE. OBEs for this group were primarily described as meals (lunch or dinner) that were unusually large, or in which a great deal of food was available and the participant reported a sense of loss of control. These OBEs were understood as beginning as a typical meal in which the individual was hungry, and developing into a binge within a discrete period of time. For example Participant 5002 reported a binge episode that included:

> "3 bowls of pasta with cheese sauce, 5 wedges of cheese, 2 scoops of gelato, 4 slices of Italian bread, 2 bowls of salad with dressing, and 2 slices of almond cake with no icing."

Another example of an objective binge episode reported by Participant 5010 was:

"2 hot pockets, 5 large bowls of cereal with milk, 3 servings mung bean noodles, 1 grilled chicken breast, and one snack size bag of chips."

Amongst the English-speaking Latinas who reported OBEs, only 3 traditional Latin foods were included:

Participant 5010: "16 tortillas stuffed with cheese,"

Participant 5035: "fried tortilla with beans and cheese, flan,"

Participant 5047: "7 chicken and cheese enchiladas."

The most commonly reported foods consumed by the Spanish-speaking Latinas were: beans, cheese and chicken, as listed in table 3. Refer to Appendix C for word plot of most frequently used terms by Spanish-speaking Latinas.

Table 3: Most commonly reported binge foods by Spanish-speaking Latinas

	Times reported	% Reported	Reported by
Beans	5.00	100.00	5012, 5018, 5019, 5032
Chicken	5.00	75.00	5012, 5018, 5019
Cheese	5.00	50.00	5012, 5018

Every participant in this group reported consuming beans in either an OBE or a SBE. Three of the five participants in this group described binge episodes that included traditional Latino foods such as:

Participant 5032: "2 large bowls of bean and pork rind soup,"

Participant 5018: "2 servings rice, 2 servings beans, 4 pieces of meat and 15 tortillas."

All OBEs reported by the Spanish-speaking Latina women occurred during a mealtime, and were explained as meals in which the participant lost control over the

amount they were eating since food was available. For example, one participant described an OBE to include:

> Participant 5012: "2 pieces of fried chicken breasts with gravy, large scoop of mashed potatoes, salad with cheese, 8 pickles, corn and spinach, a 4 inch serving of shredded beef with vegetables, chocolate cake with ice cream, carrot cake, sweet bread, and a mini hamburger with pickles and cheese."

This was also the case for most of the reported SBEs, for example:

> Participant 5019: "dinner at McDonald's was a chicken sandwich and 2 servings of French fries."

As reported by the English-speaking White women the most commonly reported foods consumed were: salad, rice, and bags of chips or pretzels, as listed in table 4. Refer to Appendix D for word plot of most frequently used terms by English-speaking White participants.

Table 4: Most commonly reported binge foods by English-speaking White women

	Times reported	% Reported	Reported by
Salad	6.00	40.00	3, 20
Rice	4.00	60.00	20, 3, 54
Bag (of chips/pretzels)	3.00	60.00	20, 57, 54

The English-speaking White women also primarily reported binge episodes during a mealtime, with most binges during dinner. There were also reports of binge episodes at night after a long day at work or during a night out with friends. An example of an OBE from this group that occurred during dinner:

Participant 20: "1.5 plates of tuna salad, pasta salad, lettuce, rice, mashed potatoes, 8 inches of pork, 1 chicken wing, a bite of a rib, coconut flan, 1 meat pocket, 3 inches of fish, and parmesan crusted pork."

Another participant reported a late night binge of:

Participant 54: "Snacks- 10 oz. bag of pretzels, large box of animal crackers, 4 oz. rice crispy treat, 3 mini Reese's eggs, 4 chips ahoy cookies, a bag of carrots, 4 red vines (candy), and 1 dinner roll."

The only SBE reported was a lunch of:

Participant 49: "a cup of yogurt, 2 bowls dry cereal and an apple."

3.3 Setting of Binge

For the English-speaking Latinas most of the settings in which binges were reported were during group meals in a restaurant. For example two women reported eating at an Indian buffet and two others at an Italian restaurant. The second most commonly reported binge episode setting was while home alone. Several participants described eating as "mindless," with other reports such as "I ate because I was bored," and "I was watching TV and not paying attention to what I was eating." Additionally, several participants reported binge episodes during a family meal, as reported by the following statement:

Participant 5013: "I didn't feel bad at first because I was at my sister's birthday party but then I thought to myself 'why am I eating all this?'"

Only one Spanish-speaking participant reported a binge episode at a Chinese buffet restaurant. All other reported binge episodes for this group occurred at home and/or during a family meal. Binges were reported during breakfast, lunch and dinner.

The binge episodes described by the English-speaking White women occurred either in a restaurant with a group or at home alone. One participant reported picking up food to eat on her way home and stated, “No one would be home.” Another participant reported eating at a restaurant with friends where the portion sizes were huge and her meal came with two salads and a breadbasket on the table.

3.4 Loss of Control

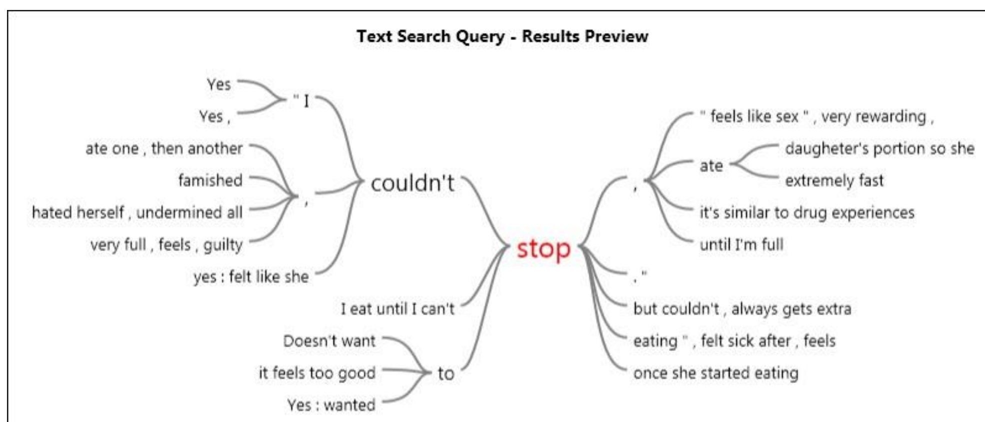
The descriptions of loss of control for the English-speaking Latinas primarily fell into one of three categories:

1. Participants’ report of feeling unable to stop eating, demonstrated by the following statements:

> Participant 5010: “Before I knew it most of it was gone, I kept eating anyway, thinking ‘I can’t believe I am eating all this,’”
>
> Participant 5001: “I ate until I burst, I was raised to eat everything.”

As shown in Figure 1 below, many participants’ comments included the word “stop” in a variety of contexts:

Figure 1: Responses including the word “stop”



2. Eating in response to a negative emotional state or to improve one's emotional state, examples include:

Participant 5003: "I felt stressed"

Participant 5022: "I just felt like crap so I was compelled to keep eating,"

Participant 5036: "It tasted good and made me feel happy again."

3. Eating due to social pressure from family and friends, illustrated by the following quotes:

Participant 5047: "I wanted to stop but I couldn't, I always have to get extra servings with my family,"

Participant 5048: "There is no other option during a family meal, I have to overeat when my family is around, if I don't eat all the food it will go to waste."

The Spanish-speaking Latina women reported two themes to describe their sense of loss of control during a binge episode:

1. Being unable to stop:

Participant 5012: "I felt guilty, I couldn't stop,"

Participant 5019: "I just eat and eat when I'm bored."

2. Eating too much until uncomfortably full:

Participant 5018: "When I'm hungry, I eat until I can't take any more until I am really full."

The experience of loss of control described by the English-speaking White women demonstrated two themes:

1. Being unable to stop:

Participant 54: "I have to finish a box or bag after I start,"

Participant 57: "I could not have stopped."

2. The positive emotional experience of eating:

Participant 54: "I couldn't stop. It's similar to drug experiences I've had. I only plan to have a little and then it feels too good to stop,"

Participant 3: "I knew exactly what I was doing, it felt good and then after I commented to myself that I can't do this anymore, I always feel bad after."

CHAPTER 4: DISCUSSION AND CONCLUSIONS

The aim of the current study was to create a descriptive understanding of binge eating disorder symptoms as experienced by Latina women, as well as to consider the influences of culture and acculturation and the specific presentation of such symptoms. The current study described what Latina and White women diagnosed with binge eating disorder eat during a binge, the setting in which they typically binge, and their own descriptions of loss of control. These descriptions were compared among English and Spanish-speaking Latina women as well as against a small comparison sample of White females.

The current study found that across levels of acculturation (as defined by primary language) and education, Latina women with BED reported at least moderate levels of distress, depression, and concern about their weight and shape in their self-evaluation. This finding is consistent with the literature's understanding of the pathology of binge eating and the emotional constructs, such as distress and depression that often trigger a binge. The current study also revealed similarities and differences between Latina women from this study and White women from three comparison studies (Franko, Becker,

Thomas, & Herzog, 2007; Masheb & Grilo, 2005; Streigel-Moore et al., 2010) across a variety of variables.

Overall, the majority of the population from the current study had completed at least some college. Recruitment occurred predominantly on University campuses and a large portion of the population in the current study was made up of college students, so this trend can be attributed to sampling. By contrast, of the Spanish-speaking Latinas only 25% had completed some college. The variation in level of education was likely due to recruitment. Additionally, the Spanish-speaking Latinas were, as a group, older than the English-speaking Latina women. This result can also be attributed to recruitment procedures, since younger college students made up the majority of the English-speaking Latina sample while the Spanish-speaking Latinas were all recruited from the broader community.

Overall, the findings suggest that both shape and weight are at least of moderate concern and importance to individuals' self-evaluation across ethnic groups and levels of acculturation. Of the groups in the current study, the Spanish-speaking Latinas reported the greatest level of concern about their shape, and indicated that it is a major component in their perception of their self-image. This was an unexpected finding, since the literature suggests that with greater acculturation women in the United States are more likely to adjust to American beauty standards and body shape ideals (Fernandez &

Prichard, 2012; Warren et al., 2005). This result indicates that even traditional Latina women are likely to place a great deal of importance on their shape when evaluating themselves regardless of their opinion of ideal body type or level of acculturation.

Of the English-speaking Latinas in the current study, participants from Los Angeles reported greater concern about their weight and importance of their weight in consideration of their self-image, than did the participants from Charlotte, this may be due to regional differences in social norms. Though not specifically addressed in this study, difference in importance of weight and shape may not only vary by group membership, but also by region in which one lives. The relationship between an individual's cultural influence and the influence of the general culture of the society in which they live may interact to inform the individual's body concept. Social norms and influences which vary regionally across communities may have allowed for variation in the reports between the Latinas from Charlotte and those from Los Angeles.

Additionally, the English-speaking Latina women from both Charlotte and Los Angeles reported, on average, mild symptoms of distress and depression. Interestingly, while the Spanish-speaking women from the current study also reported mild distress, their average level of depression was minimal, with mean scores much lower than the other groups from the current study and the comparison studies (Franko, Becker, Thomas, & Herzog, 2007; Masheb & Grilo, 2005; Streigel-Moore et al., 2010). The limited reports of depression by Latina women may be due to the cultural acceptance of expression of depressive symptoms and identification of the factors mentioned on the BDI. Latina women may not be as socialized to identify and share negative emotions and related symptoms, as are White women in the United States who generally are much

more expressive about negative emotions and experiences. Since the women included in the current study all met criteria for a clinically significant binge eating problem, it is consistent with the diagnosis that they reported experiencing some level of distress in relation to their binge eating episodes.

The symptoms and characteristics of BED found in the Latina sample were consistent with the literature and fell within ranges similar to the White samples from the three comparison studies (Franko, Becker, Thomas, & Herzog, 2007; Masheb & Grilo, 2005; Streigel-Moore et al., 2010). The general characteristics of BED seem to apply to women regardless of demographic characteristics such as age, level of education and ethnicity. Knowing that these symptoms are consistent across ethnicities is important for professionals to ensure appropriate identification of BED. At the same time, the findings indicate that there is certainly some variation in the experience of BED amongst women of different ethnicities and regions. These differences are manifested in the experiences of loss of control, the types of foods consumed during binge episodes, and the settings in which episodes occur.

The experience of loss of control was described in a similar manner across the three groups, and several themes were identified in more than one group. In participants' descriptions of loss of control, four themes emerged from across the groups: being unable to stop, eating until uncomfortably full, eating in relation to an emotional state, and eating in response to social pressure. Many of the women described their loss of control experiences in relation to early childhood experiences and how the women were raised and socialized to eat, which is likely attributed to the importance of food and mealtime in Latin culture. Latino families are more likely than any other ethnic group to regularly eat

dinner together as a family (Sealy, 2010). Additionally, Latina women often express care giving and love through the provision of food and may be offended if their food is not consumed to the extent they believe to be appropriate (Kaufman and Karpati, 2007). However, only the Spanish-speaking Latina women described experiences of loss of control in which they ate until uncomfortably full or until the point of physically being unable to eat any more. This pattern may exist because the Spanish-speaking women reported less personal control over their eating threshold than did the other women; it may have required physical discomfort for them to allow themselves to stop eating in the context of their family meal.

An important observation was variation in the experience of loss of control in response to an emotional state; English-speaking Latina women reported eating in response to negative emotional states, while the White women primarily reported eating to induce positive emotions. This is an interesting distinction, and there was some overlap between the two groups and the emotional experiences described. This variation in perspective may be related to underlying cultural values, and the expression of emotions based on culture. It is also interesting to note that eating in response to an identified emotional state (negative or positive) was similarly reported by both English-speaking Latinas and the White group, but not identified at all by the Spanish-speaking Latinas. This pattern, as with depression, may have been related to the extent to which it is culturally appropriate to vocalize negative emotional states. Perhaps this phenomenon (i.e., emotional eating) was indeed experienced by the Spanish-speaking Latinas as well but was simply not verbalized. Alternatively, since the context of many of the Spanish-speaking Latinas' binge episodes was during family meals, one can hypothesize that the

experience of emotional states, or effort to change emotional state, may be masked or hard to identify when binge episodes occur during “normal” meal times and/ or in a social context with others.

Given the importance of food and mealtimes in Latin culture, it was not surprising that many of the Latina women reported eating in response to social pressure. However, it was surprising that this theme was only identified in the English-speaking Latinas, when it was excepted across the Latinas. This theme was distinct because participants reported continuing to eat, not because of their own values pushing them to have more servings or finish the meal, but because of family and friends enforcing such values. Within many Hispanic households individuals are encouraged to finish the food on their plates, and consume portions much larger than those suggested as developmentally appropriate by the FDA (Sealy, 2010). Many English-speaking Latina women reported having to eat a great deal around family, feeling unable to turn down extra portions, and not having another option but to appease others and eat the socially appropriate amount. This theme was perhaps the most significant, since it has not been addressed in prior research literature and may be a strong predictor of binge eating behavior and related symptomatology (Shugart, 2013). The finding may be explained by acculturative stress or familial pressure to avoid acculturation (Revollo, Qureshi, Collazos, Valero, & Casas,2011). The English-speaking Latinas may be experiencing the highest level of acculturative stress as compared to the more traditional Spanish-speaking Latinas (or White women). For the English-speaking Latinas, eating a lot in the context of their family may allow them to demonstrate that they are still adhering to the cultural expectations, and may be a means of coping with the acculturative stress they experience.

The findings from this study indicate that the experience of loss of control does occur in Latina women who binge eat, and that their experience of a sense of loss of control is very similar to that described by White women. The idea that the experience of loss of control is similar in Latinas, yet that it is not being identified by professionals to allow for appropriate diagnosis, is of great value (Reyes-Rodrigues, Ramirez, Davis, Patrice, & Bulik, 2013). It is important that professionals responsible for diagnosis not only ask culturally appropriate questions but also be cognizant of and sensitive to variations in binge experiences between individuals. The problems of under-diagnosis and under-treatment of eating disorders in Latinas may decrease with improved understanding of the experience of the binge episode itself.

An understanding of which foods are most likely to trigger a binge for an individual could be of clinical utility for both the client and the treating professional. For example, chicken eaten during a meal was reported as part of an OBE by the majority of the English-speaking Latinas, and may have been a trigger food for many of the women. Helping women who are undergoing treatment for BED to be prepared for exposure to trigger foods and to replace trigger foods could be very helpful to treatment. Since food and meals cannot be avoided completely, interventions that focus on such culture-specific trigger foods can be particularly effective. Given that “chicken” is not typically reported as a binge food in the treatment literature, educating health care providers of its significance for Latinas with BED is an important step towards improved detection and treatment.

In general, the binge episodes described by both groups of Latinas were large, with very few SBEs reported. Almost all of the binge episodes reported by Latinas

occurred during lunch or dinner in which the participant reported engaging in a typical meal and then losing control and consuming more than would be considered normal. Many Latina women described binge episodes in which they began with a regular meal and then sought additional food to continue the eating episode after the meal, resulting in the consumption of a wide assortment of types of food based on what was available. The concept of binging in the context of a regular meal has not been previously discussed in the literature. Almost no binge episodes reported by this group occurred as a result of or preparing to consume particular foods or planning to engage in a binge-eating episode, which was an interesting finding, as it contrasts with common reports of White women with binge eating disorders, who tend to plan to engage in binge episodes and to consume specific foods, or in specific settings such as at home when alone (Friedman, 2008). The experience of binge eating in the context of what began as a typical meal may be much more challenging in treatment than a binge that occurs as the result of planning, since eating at family meals at regular intervals is generally healthy and socially encouraged.

Similar to the Latina women, the White women made some reports of binge episodes during meal times, in which they lost control and ate too much, or continued to eat after the conclusion of the meal. However, this group also reported several instances of binge episodes late at night, for example, after a long day of not having eaten much. The binge episodes described by the White women included more snack foods, such as pretzels, as well as sweets such as candy and cookies, than did the Latina women. The reliance on snack foods to binge may have been the reason that the White women in this study did not report chicken and other foods typically associated with a meal. The Latina women may have been more likely to grow up eating regularly scheduled family meals

than the White women. Latina women are also more likely to live with family members later into life, and even as adults, while White women are more likely to live alone (US Department of Commerce, 2013). This cultural variation may account for the finding that Latinas are more likely to binge during meals, while White women are more likely to binge during non-meal times and to consume snacks while eating alone.

The Latinas reported most binge episodes at home and/or during a family meal. These reports are consistent with the traditional Latin values of eating family meals, and consuming large amounts of food to please and be accepted by family members. The meal experience is an opportunity for family time and often a time for recreation, and thus a method of stress reduction. For many Latinos, family mealtime is also a time for comfort and the expression of caring and compassion towards one another (Sealy, 2010). By contrast, the White women reported greater planning of their binge episodes, and described specifically planning to binge when they knew no one would be home, or purchasing particular foods that they enjoy to consume during binge episodes. Such findings have been described in research on binge eating in White women and are consistent with prior research (Friedman, 2008). An understanding that White women tend to plan and prepare for a binge that occurs alone, but that in general Latinas do not plan binges and eat during group meals, could be vital for diagnosis and treatment of BED in Latinas, as it could allow for professionals to better recognize that BED is expressed differently in varying groups of women. Treating professionals might encourage patients to openly communicate with family members about eating patterns, concerns and limitations. They might also encourage patients to work on slowly setting boundaries for food consumption in the context of family meals; small changes over time

might allow for family members to gradually adjust expectations, in turn providing the patient with the support needed for recovery.

4.1 Strengths and Limitations

Firstly, there was limited data available describing the variables of interest for Latinas, and therefore no direct comparison to the literature on Latinas was possible. Furthermore, there was no descriptive qualitative data describing binge eating or loss of control provided in the published literature, and therefore no comparison findings or established methodological framework for the current study were available. At the same time the strength of the current study is its contribution to an area of the literature that has been underdeveloped. There are currently no published studies exploring the characteristics of eating disorders using qualitative data. The major strength of the current study is that it is unique in the exploration of participant's own narratives of what they eat during a binge episode, the context in which they binge, and their personal experience of loss of control.

A major limitation for the current study was the small sample size. The Spanish-speaking Latina group had only 4 participants, a very small group and much smaller than that of the English-speaking Latina women. Additionally, having to use unpublished data on White women for the descriptive analysis also resulted in a very small comparison group. These small groups limit the generalizability of the results of the current study and our ability to draw any conclusions.

Secondly, assuming levels of acculturation based on language of participation does not allow for the best understanding of variation in culture and acculturation. The differentiation between the two groups' levels of acculturation is not ideal, nor does it

allow for a true understanding of the influence that acculturation may have on eating disorder symptoms and experiences. These are limitations that could be addressed in future studies seeking to understand the influence of acculturation. For example, future studies could include a reliable and valid measure of level of acculturation to create comparison groups, or create groups based on generational status.

Additionally, the EDE was developed by White male researchers and thus may have created pre-determined responses that did not consider variation in responses due to culture and gender. Nevertheless a strength of the EDE is that it asks open-ended questions, particularly when probing for the OBEs and SBEs, which allowed for participants to provide their own responses and created rich qualitative data.

4.2 Conclusions and Implications

The understanding gained from a descriptive picture of the experience of binge eating in Latina women may allow for future research in identification of eating disorders in this at-risk population. The comparison of the experience of binge eating amongst women of different levels of assumed acculturation, and the more traditionally studied White women is useful in understanding how these experiences differ amongst women of different backgrounds and ethnicities.

Improvement in identification of eating disorders based on an understanding of what constitutes a binge episode and how it is experienced, may allow for improvements in diagnosis and treatment for Latinas. Additionally, an improved understanding of the influence of culture on symptom presentation can allow for more accurate detection, diagnosis and treatment of eating disorders in ethnic minorities who have been traditionally under-diagnosed and under-treated.

The finding that Latinas binge eat during typical meals while White women binge more often while snacking between meals or in the evening, may have one of the most important implications of this study. Understanding that Latina women are binging on foods associated with healthy meals, and that binges occur during meal times, when family meals are highly promoted by medical professionals, is of great value to the diagnostic and treatment process, especially since it may have not been previously addressed. Treating professionals could use this understanding to help patients engage in techniques to reduce and prevent binging in the context of normal meals. They might encourage not consuming trigger foods, limiting eating with family members who allow the patient to feel pressured to eat, and re-conceptualizing the important aspects of the family meal, such as spending time with one another and participating in conversation in addition to eating.

Practitioners should also be made aware of the phenomena of binging during meals and trigger food consumption and make use of them when addressing eating, and possibly weight, concerns. Awareness of the distinction amongst groups in the type of foods consumed during a binge and the setting in which binges occur is not only important for diagnosis but also for treatment, as unlike late-night snacking, regular meals are generally healthy and should not be avoided. Treating professionals should use this understanding to adjust treatment plans and seek improved treatment outcomes

4.3 Recommendations for Future Research

The sample size in this study, particularly for the qualitative analysis with the Spanish-speaking Latina women and the White women was not sufficient to make strong comparisons amongst groups, nor would causal statements be appropriate. However, the

data collected from these participants should be used to inform future research that more specifically seeks to identify the descriptive experience of binge eating disorder, using open-ended questions and open coding during analysis. Future studies should seek to include a more objective measure of acculturation that can allow for better comparison amongst groups, this could allow for better comparison of groups and a more true understanding of the influences of culture and acculturation. Research might also seek qualitative descriptions of binge episodes and related characteristics for the purpose of better understanding those descriptions, rather than to diagnose an eating disorder as is the goal of the EDE. Additional research may also seek to include more participants from the community rather than a university campus to allow for a wider representation of binge eating problems and experiences and greater generalization of results and conclusions.

This study's main findings demonstrate that Latina women and White women express similar symptoms of binge eating including loss of control, concern for shape and weight, and distress, yet Latina women consume different foods during binge episodes and are more likely to binge during a meal, while White women are more likely to binge on snack foods during a non-meal time and when alone. These findings can continue to allow for improvements in diagnosis and treatment of binge eating disorder across ethnic groups, as well as inform future research on the importance of influences of culture and acculturation.

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APPENDIX A: EDE QUESTIONS

Questions used from:
The Eating Disorder Examination, 12th Edition (EDE; Fairburn & Cooper, 1993)

OBE Probe: I would like to ask you any episode of eating that you might have had over the past four weeks. Different people mean different things by overeating. I would like you to describe any times when you have felt that you have eaten to much at the time.
Did you have a sense of loss on control at the time?

SBE Probe: Have there been any times you have felt that you have eaten too much, but other might not agree? For example, have there been any times when you have had a small or smaller amount of food with a sense of loss of control?

# of OBEs: On how many days over the past 28 did you have episodes like (OBE example) where you ate a large amount of food and had a sense of loss of control?

# of SBEs: On how many days within the past 28 did you have episodes where you ate a smaller amount of food but did feel a sense of loss of control?

Distress about binge eating: In general, how distressed or upset have you felt about these episodes (refer to the OBE example)? Would you say that you have felt extremely distressed, greatly distressed, moderately distressed, slightly distressed, or not distressed at all?"

1-Not at all
2-Slightly
3-Moderately
4-Greatly
5-Extremely

Importance of weight: I am now going to ask you a rather complex question - you may not have thought about this before. Over the past four weeks, has your weight (the number on the scale) been important in influencing how you feel about (judge, think, evaluate) yourself as a person?

Importance of shape: Similar to the previous question, I am now going to ask whether, over the past four weeks, your shape has been important in influencing how you feel about (judge, think, evaluate) yourself as a person?

0 - No importance
2 - Some importance (definitely an aspect of self-evaluation)
4 - Moderate importance (definitely one of the main aspects of self-evaluation)
6 - Supreme importance (nothing is more important in the subject's scheme for self-evaluation)

APPENDIX B: ENGLISH-SPEAKING LATINA MOST FREQUENT WORDS

Most commonly reported words as indicated by size for English-speaking Latina women.

APPENDIX C: SPANISH-SPEAKING LATINA MOST FREQUENT WORDS

Most commonly reported words as indicated by size for Spanish-speaking Latina women.

APPENDIX D: ENGLISH-SPEAKING LATINA MOST FREQUENT WORDS

Most commonly reported words as indicated by size for English-speaking White women.