A CULTURALLY ADAPTED INTERVENTION TO TREAT BINGE EATING IN AFRICAN AMERICAN WOMEN WITH BINGE EATING

by

Tamara Nicole Scott

A dissertation submitted to the faculty of The University of North Carolina at Charlotte in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Health Psychology

Charlotte

2016

Approved by:

Dr. Virginia Gil-Rivas

Dr. Fary Cachelin

Dr. Amy Peterman

Dr. Crystal Piper

©2016 Tamara Nicole Scott ALL RIGHTS RESERVED

ABSTRACT

TAMARA NICOLE SCOTT. A culturally adapted intervention to treat binge eating in African American women with binge eating. (Under the direction of DR. VIRGINIA GIL-RIVAS)

Binge eating (BE), a specific type of overeating, is characterized by a pattern of consuming unusually large amounts of food in a discrete period of time combined with a sense of loss of control. Although research suggests similar rates of binge eating disorder (BED) in White and African American (AA) women, AA women report more frequent BE episodes and a more recurrent pattern of BE. While treatment is indicated, few AA women seek treatment for BE. One reason for this may be a lack of acknowledgement of sociocultural influences that shape experiences and behaviors related to BE in current interventions. Culturally adapted effective interventions meet the need of acknowledging these sociocultural factors and producing expected outcomes. This qualitative study begins the process of culturally adapting an evidence-based treatment for AA women with BE to reduce BE. Sixteen AA women with BE participated in focus groups to determine the need for adaptations to an evidence-based treatment for BE. Thematic content analysis was used to analyze data from the groups. Results highlight the unique experiences of AA women with BE and described both positively and negatively viewed aspects of the intervention. Specific recommendations for changes to the intervention are given based on these results. This research adds to the current discourse of culturally adapting interventions for more targeted use and helps to expand what is known about AA women with BE.

Keywords: binge eating, cultural adaptation, African American women

DEDICATION

This dissertation is dedicated to my family. Without your love and support, this milestone would merely be a dream. Thank you for always being so encouraging and patient with me as I have traveled along this educational journey. You are incredible people and I am so blessed to live life with you by my side.

ACKNOWLEDGMENTS

This research would not be possible without the assistance of several individuals and organizations. First, I would like to acknowledge the dedication of my academic advisor and dissertation chair Dr. Virginia Gil-Rivas. Dr. Gil-Rivas, thank you for your collaboration, support, and reassurance throughout my entire doctoral education. I would also like to acknowledge the support of my advising and dissertation committees: Drs. Fary Cachelin, Amy Peterman, and Crystal Piper. Dr. Cachelin, thank you for welcoming me into the Women's Health Project research lab and exposing me to a research area I would come to love. Dr. Peterman, thank you for your never-ending kindness, optimism, support and enthusiasm. Dr. Piper, thank you for your encouragement and helping to broaden my perspective about the importance of this research. Second, I would like to thank the members of the Women's Health Project Research Lab for all your support with the many tedious, but important tasks it takes to conduct research. I would also like to acknowledge the UNCC Health Psychology program for providing funding and resources to complete this project. To program faculty and staff, thank you for the knowledge shared, the many questions answered, and guidance along the way. Thank you to UNCC, the Greater Enrichment Program, and Cherokee Health Systems for your partnership in completing this research. Finally, I would like to acknowledge and thank the participants of the study, as this research would not be possible without their contribution.

v

TABLE OF CONTENTS

LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW	1
CHAPTER 2: RATIONALE AND SPECIFIC AIMS	9
CHAPTER 3: RESEARCH METHODS	26
CHAPTER 4: RESULTS	35
CHAPTER 5: RECOMMENDED CHANGES AND DISCUSSION	69
REFERENCES	85
APPENDIX A: LOGIC MODEL	97
APPENDIX B: LIST OF CODES	98

LIST OF TABLES

TABLE 1: Participant demographics	65
TABLE 2: Participant eating characteristics Image: Comparison of the second	66
TABLE 3: Themes from the focus groups	68

LIST OF FIGURES

FIGURE 1: Conceptual model of potential cultural adaptations needed to the evidence-based treatment of BE	15
FIGURE 2: Flowchart of study participation	31
FIGURE 3: Study measures	33
FIGURE 4: Flowchart of participant recruitment	36

CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

African American (AA) women have a significant burden of chronic illness, as they have one of the highest rates of disease as compared to other racial and ethnic groups (Centers for Disease Control and Prevention (CDC), 2014). One important way to reduce risk for chronic disease is to encourage individuals to reach and maintain a healthy weight (CDC, 2011). Traditional methods of weight management include increasing physical activity and fruit and vegetable consumption (United States Department of Health and Human Services (USDHHS), 2010). However, this approach largely ignores another culprit for weight gain and compromised physical functioning; that is, how often and how much one eats. Binge eating (BE), a type of clinically significant overeating, involves eating an unusually large amount of food in a discrete period of time, in the absence of any compensatory behaviors, and experiencing distress related to these eating habits (American Psychiatric Association (APA), 2013). Binge eating disorder (BED), a recurrent form of BE, includes engaging in BE on at least a weekly basis and experiencing three or more additional symptoms including eating more rapidly than normal, eating until uncomfortably full, eating large amounts of food when not physically hungry, eating alone because of embarrassment, or feeling disgusted, depressed, or guilty after engaging in BE (APA, 2013). BE is a significant concern as it is associated with a host of psychological and physiological effects including changes in metabolic functioning, low mood, other psychiatric disorders and an increased likelihood for being

overweight (Adamus-Leach et al., 2013; Bello & Hajnal, 2010; Geliebter, Gluck, & Hashim, 2005; Pike, Dohm, Striegel-Moore, Wilfley, & Fairburn, 2001; Striegel-Moore et al., 2003; Taylor, Hubbard, & Anderson, 1999). Therefore, understanding and effectively treating BE and BED can be seen as investments for improving overall health.

BE and BED were initially thought to primarily affect young White women. However, recent estimates and a meta-analysis show similar rates of BE across AA and White women (Pike et al., 2001; O'Neil, 2003; Striegel-Moore et al., 2003). While group differences in the prevalence of BED have not been identified, there are marked differences in AA women's experiences and behaviors related to BE. For example, AA women report a higher frequency and larger numbers of BE episodes and higher rates of co-occurring mood disorders than White women (Pike et al., 2001). Therefore, AA women and White women who both meet criteria for BE likely have different day-to-day experiences of this disordered eating.

Importantly, AA women have less success with treatment for BED as compared to White women, again highlighting dissimilarity in the experience of these conditions (Pike et al., 2001; Striegel-Moore et al., 2003). Therefore, treating this concern in a way that addresses differences in experiences may provide a more appropriate treatment for AA women with BE. One way to both utilize evidence-based treatment and account for important sociocultural influences is the process of cultural adaptation (Whaley & Davis, 2007). Research shows that cultural adaptation of evidence-based treatment is likely beneficial for AA women with BE (Davis, Clance, & Gialis, 1999). Furthermore, the socioecological model (Bronfenbrenner, 1977; McLeroy, Bibeau, Steckler, & Glanz, 1988) highlights the utility of considering social and cultural factors in addition to intraindividual factors for understanding health outcomes (Fleury & Lee, 2006; Robinson, 2008). Overall, the current project aims to determine the need for adapting an evidence-based intervention for use with AA women with BE.

Literature Review

Binge Eating

BE, a more severe form of overeating, is distinguished by eating unusually large amounts of food in discrete periods of time and feeling a sense of loss of control (APA, 2013). While most people engage in overeating at some point in their lives, BE can occur in recurrent patterns and be of clinically significant concern. BED was recently added to the 5th edition of the Diagnostic and Statistical Manual of mental Disorders (DSM-5) as its own diagnosis, as it was previously considered an unspecified eating concern (APA, 2000; APA, 2013). BED is defined by 1) the presence of BE or eating an unusually large amount of food in a discrete period of time with a sense of loss of control; 2) BE episodes that are characterized by at least three common symptoms including eating more rapidly than normal, eating until uncomfortably full, eating large amounts of food when not physically hungry, eating alone because of embarrassment, or feeling disgusted, depressed, or guilty after engaging in BE; 3) individuals endorse distress surrounding BE; 4) BE occurs at least once a week for at least three months; and 5) BE is not associated with compensatory behaviors and does not occur in the context of another eating disorder (APA, 2013). The recognition of BED as a significant psychological concern both heightens awareness and calls for additional research on the treatment of this disordered eating pattern.

A little less than 3% of U.S. adults will experience BED within their lifetime, with a little over 1% experiencing BED in the past 12 months (Hudson, Hiripi, Pope Jr., & Kessler, 2007). However, this may be an underestimation of the prevalence of BED as Hudson and colleagues (2007) utilized a strict diagnostic guideline. Specifically, their prevalence estimates are based on at least two BE episodes per week as compared to the minimum of one occurrence of BE per week as defined by current diagnostic standards (APA, 2013; Hudson et al., 2007). As new research is completed, rates of BED may increase due to the lowered threshold for diagnosis. However, even using conservative estimates, there are differences seen in the experience of BE among different groups. For example, women show twice the prevalence of BED as compared to men (Hudson et al., 2007) and while BED was previously thought to primarily affect White women, recent estimates show similar rates across racial groups. In one of the few studies examining rates of BED in AA women, a little more than 2% of AA women met diagnostic criteria (Taylor, Caldwell, Baser, Faison, & Jackson, 2007). However, research shows that 23% of AA women may report engaging in some form of BE behavior (Mulholland & Mintz, 2001). In this context, BE may be even more prevalent among AA women. More importantly, as noted above, appropriate treatment for this disorder within this group may be a much greater concern.

One important caveat to consider when reviewing the relevant literature is heterogeneity in the focus on BE versus BED. This is likely due to BE and BED previously being considered an unspecified eating concern and a lack of specific and widely accepted guidelines to label BED (APA, 2000). As such, the literature reviewed below generally adheres to the original use of these terms. However, in spite of using these varied terms, each study describes individuals who are experiencing the common symptom of eating an unusually large amount of food, and experiencing a sense of loss of control during the eating episode. A description of physical, psychological and sociocultural implications of BE and BED is provided below.

Physical Health Implications of BE

BE and obesity are highly comorbid, particularly for AA women. Indeed, between 50-80% of AA women with BED are obese compared to 30-50% of White women (Pike et al., 2001; Striegel-Moore et al., 2003). Overweight and obesity are identified as a body mass index (BMI) of greater than or equal to 25 or greater than or equal to 30, respectively (CDC, 2012). Although not an actual measure of body fat percentage, BMI often correlates with amount of fat and is related to significant health risk. More specifically, this includes an increased risk for high blood pressure, heart disease, stroke, type 2 diabetes, certain cancers, respiratory dysfunction, osteoarthritis, infertility, liver disease, gallbladder disease, high levels of triglycerides and high cholesterol (CDC, 2011). Additionally, AA women who report greater dietary fat consumption and a higher body mass index show increased BE symptoms (Wilson et al., 2012,). Furthermore, a higher body fat composition is associated with greater severity of BE in AA women (Adamus-Leach et al., 2013). However, the biological implications of BE seem to go beyond those associated with food consumption and weight just as the risks associated with overweight and obesity go beyond simply excess weight. BE has been shown to impact metabolic functioning such as disrupting the release and use of hormones leptin, ghrelin and dopamine (Bello & Hajnal, 2010; Geliebter et al., 2005; Taylor, et al., 1999). The function of leptin, which acts to suppress appetite, and ghrehlin, which induces

appetite, is diminished in those who are overweight and overeat, essentially dismantling normal hunger and satiety signals (Hellstrom et al., 2004). BE is also related to higher levels of extracellular dopamine, but also decreased dopamine sensitivity (Corwin, Avena, & Boggiano, 2011; Mathes, Brownley, Mo, & Bulik, 2009). In this way BE is related to both an increased craving for food and less satisfaction from food ingestion (Avena, 2007). The disruption in metabolic functioning can be dangerous as these hormones support essential bodily functions and help to regulate the immune system (Baatar, Patel, & Taub, 2011; Beck et al., 2004; Fantuzzi & Faggioni, 2000). Therefore, BE is associated with significant physical health concerns including metabolic dysfunction and the impact of BE on health is likely to be greater among women who are overweight or obese.

Psychological Implications of BE

While BED is in itself a psychological disorder, BED in AA women is associated with other psychological concerns. Almost half of AA women with BED meet criteria for a concurrent mood disorder, with major depression, social phobia and dysthymia as the most frequently endorsed complaints (Pike et al., 2001). Notably, over 80% of AA women with BED have experienced a clinically significant mood disorder at some point in their lives (Pike et al., 2001). The relationship between mood and BED in AA women is further strengthened when considering that depression is associated with more severe symptoms of BED (Adamus-Leach et al., 2013). This link is also important for AA women with BED and highly comorbid overweight or obesity, as obesity has shown a strong, reciprocal relationship with depression (Luppino et al., 2010). Furthermore, obese AA women with BED are more likely to present with comorbid psychiatric conditions

than White women (Grilo, White, Barnes & Masheb, 2013). Therefore, BED in AA women is associated with significant comorbid psychological concerns. Traditional Treatment of BE

As the literature suggests, BED is a clinically significant concern. Fortunately, BE is treatable with already available evidence-based approaches. The recommended treatment for BE is cognitive behavioral therapy, which focuses on modifying behaviors such as enacting a regular pattern of eating and challenging maladaptive thoughts related to eating (APA, 2012; Wilson, Grilo, & Vitousek, 2007). Although treatment is indicated, many AA women with BE may not utilize these resources. Less than 8% of AA women with BED seek treatment for disordered eating as compared to over 20% of White women (Pike et al., 2001). Research also shows that the few AA women who do receive treatment may be significantly different than those who do not access care. AA women who meet criteria for BED and received treatment are more likely to have a higher BMI, have higher levels of dietary restraint and have more concern about their shape and eating than those who have not received treatment (Grilo, Lozano, & Masheb, 2005). Furthermore, AA women who have received treatment for BED show lower frequency of pre-treatment BE episodes than non-treatment seeking AA controls with BED (Grilo et al., 2005). As such, those who do not seek treatment, a majority of AA women with BED, seem to have an even greater burden of disease than AA women who access care. Even AA women with BE who seek treatment may benefit from adapted interventions, as AA women are more than twice as likely to drop out of treatment as compared to their White counterparts who seek treatment for BE (Thompson-Brenner et al., 2013). However,

there is insufficient data on treatment outcomes for this group to determine effectiveness

of traditional treatment approaches (Thompson-Brenner et al., 2013). Consequently, there is a need for the creation of effective treatment that is both accessible and appealing to AA women.

CHAPTER 2: RATIONALE AND SPECIFIC AIMS

One reason for the minimal success of traditional treatment approaches for AA women may be the differences seen in BE symptoms among AA women as compared to other groups. AA women are more likely to engage in recurrent BE and are more likely to engage in related behaviors including fasting, diuretic, and laxative abuse, as compared to White women (Cachelin, Veisel, Barzegarnazari, & Stiegel-Moore, 2000; Striegel-Moore et al., 2003). AA women with BED also have a greater frequency of BE episodes than their White peers, with AA women reporting two additional episodes per week (Pike et al., 2001). Furthermore, AA women differ in their emotions and cognitions related to BE as compared to White women. Specifically, AA women with BED report less concern about their weight and shape, less dietary restraint, and lower overall concern with their BE episodes (Pike et al., 2001). Although the distress is there, it appears to be lower in AA women as compared to White women with BE. This highlights that traditional treatment approaches that focus on distress about eating, weight or shape as correlates of BE may be inappropriate or may need to be addressed in different ways when working with AA women. This also suggests that different views, beliefs or experiences may be fueling these behaviors in AA women with BE. Research confirms a link between stress, certain forms of coping, increased hunger, the compulsion to eat, and BE in AA women (Gluck, 2006; Groesz et al., 2012; Sulkowski, Dempsey, &

Dempsey, 2011). Furthermore, AA women who are better able to identify and express emotions show less disordered eating behaviors (Watson, Ancis, White, & Nazari, 2013). In AA women, unique types of stressors coupled with eating as a strategy for coping, may be leading to BE and BED. Overall, the experience of BE for AA women seems to differ from the experiences of women from other sociocultural groups.

An additional reason for the lack of treatment engagement and poor treatment outcomes among AA women with BE may be a dearth of interventions that consider sociocultural factors related to the experiences of AA women. AA women may have unique life experiences, beliefs, values and preferences that likely relate to BE. For example, disordered eating in AA women may be linked to the negative experience of oppression including racism, classism, poverty, or abuse (Thompson, 1992). These negative life experiences may serve as sources of trauma and distress. Importantly, trauma and distress are associated with BE in AA women (Harrington, Crowther, & Shipherd, 2010). Specifically, AA women with BE endorse significantly higher rates of trauma as compared to AA healthy controls (Striegel-Moore, Dohm, Pike, Wilfley, & Fairburn, 2002). Furthermore, PTSD is common in AA women with BED and is associated with more severe BED symptoms (Grilo, White, Barnes, & Masheb, 2012). Additional sources of distress may come from the process of acculturation, or navigating between an ethnic AA culture and the more dominant, White majority culture of the US (Landrine & Klonoff, 1994). Although AA women may be more likely to have been born in the US than other minority groups, acculturative stress has been shown to increase the likelihood of disordered eating (Kroon Van Diest, Tartakovsky, Stachon, Pettit, & Perez, 2014). Further, methods for coping with trauma may be led by common values among

AA women, such as that of the "strong black woman" and the importance of showing outward strength at all times (Harrington et al., 2010). More specifically, internalization of the "strong black woman" ideal has been shown to mediate the relationship between trauma exposure and BE by influencing both emotion regulation and eating for psychological reasons (Harrington et al., 2010). Relatedly, trauma is also associated with greater severity of symptoms in AA women with BED (Adamus-Leach et al., 2013). Additionally, even perceptions of stress are related to increased BE, hunger, and attempts to restrict and control eating (Groesz et al., 2012). Therefore, stress and negative life events experienced due to a shared sociocultural group status, as well as cultural beliefs and values such as the "strong black woman", may be important in understanding and treating BE in AA women.

Another important sociocultural consideration in understanding and treating BE in AA women is the role of values related to body image. AA women with BED may be more accepting of a larger, full-figured body frame, which likely coincides with overeating and BE (Beauboeuf-Lafontant, 2003). Therefore, BE may be an acceptable or preferred coping strategy in AA women, as the associated larger-frame may not be distressing nor a deterrent in engaging in BE. This suggests that treatment should include a discussion of alternative coping strategies. Relatedly, a larger body frame may hold esteem among AA women as a symbol of strength and power to negate weakness and pain (Beauboeuf-Lafontant, 2003). The media and AA popular culture seem to be dominated by women of a larger size, which reinforces both the acceptability of a larger size and the related ideals of strength (Beauboeuf-Lafotant, 2003). Furthermore, some AA women may purposefully overeat in order to obtain the culturally desired, larger and

curvier frame (Perez & Joiner, 2003). Therefore, appealing to the health implications of unhealthy eating patterns and weight may be an important aspect of treatment for this group.

Research also shows that patterns of eating in AA women are influenced by eating practices in the context of social events, as well as the experience of both positive and negative emotions such as eating for both celebrations and mourning (Hargreaves, Schlundt, & Buchowski, 2002). Focus groups investigating cultural influences on the eating practices of AAs show that eating may be considered a spiritual experience and hold significant meaning (Airhihenbuwa et al., 1996). Specifically, participants discussed the significance of fellowship when eating and being selective and intentional about with whom meals are shared. Furthermore, participants reported that one's kitchen and the process of preparing food can be considered sacred. Moreover, the style of cooking and seasoning food was seen as adhering to cultural norms and honoring AA cultural traditions (Airhihenbuwa et al., 1996). An intervention designed to address eating patterns and practices, needs to honor the importance of eating within this community. A separate qualitative study of food choices reveals that eating patterns are influenced by the social context including romantic partners and children (James, 2004). Participants described that when trying to make healthy eating changes, they often received negative messages from family members about not wanting to be wasteful of food and how changing one's eating is a rejection of cultural traditions (James, 2004). Addressing the potential links between sociocultural factors and eating may enhance treatment for BE. These sociocultural influences are likely important considerations in understanding BE among AA women.

Statement of the Problem

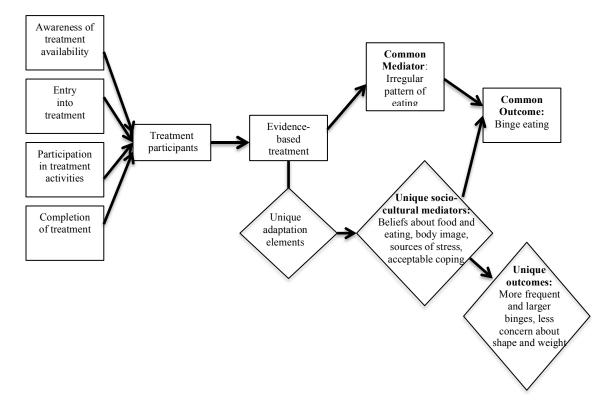
Cultural adaptation of evidence-based treatment may help to improve BE outcomes in AA women. Research reviewed above shows that AA women have unique experiences of BE. Therefore, effective treatment likely needs to address sociocultural concerns specific to this group. One way to account for sociocultural influences among AA women with BE is to utilize culturally adapted interventions. Cultural adaptation is a process where evidence-based treatments are modified to incorporate the cultural behaviors, beliefs and attitudes of a targeted population (Whaley & Davis, 2007). Culturally adapted interventions have the benefit of ecological validity, as there is generally high congruence between a targeted group's experience and the assumed experience guiding the intervention (Bernal, Bonilla, & Bellido, 1995; Bronfenbrenner, 1977). AA women show differences in both treatment seeking and treatment outcomes for BE (Grilo et al., 2005). Therefore, culturally adapting treatment for BE in AA women may improve access to care and improve retention and treatment outcomes.

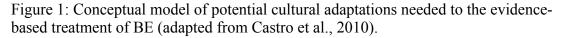
Literature in this area supports the need for culturally adapted interventions for AA women with BE (Davis et al., 1999). Specifically, prior research on needed cultural considerations of interventions to improve healthy eating behaviors suggests adaptations such as addressing spirituality and religion, considering sociocultural influences on behavior, mood, and cognitive styles, acknowledging family values, utilizing strong social networks and communities, discussing how to navigate food choices and preparation in social or cultural settings, attending to preferences for taste, and evaluating the sociocultural appropriateness of generically suggested foods (Davis et al., 1999; Davis, Clark, Carrese, Gary, & Cooper, 2005). While these interventions targeted healthy eating for weight loss, similar considerations are likely important for an intervention addressing BE. For example, the intervention may need to address how to gather support from family members both during and after treatment or how to handle feedback from elders who reject incorporating different eating patterns into family gatherings and celebrations. Research shows that underutilization of treatment among racial and ethnic minorities may be due to a failure to recognize the influence of culture (Griner & Smith, 2006). Additionally, underutilization may stem from ignoring the role of culture in treatment as there is a lack of culturally adapted interventions available within racial and ethnic minority communities (Griner & Smith, 2006). AA women with BE will likely benefit from treatment that addresses these comorbid concerns and accounts for their sociocultural experiences.

The importance of sociocultural factors and benefits of cultural adaptation are also underscored by a socioecological perspective (Bronfenbrenner, 1977; McLeroy et al., 1988). A socioecological perspective on health and health behaviors highlights the mutual interacting influences of intrapersonal, interpersonal, organizational, community/social networks, and policy on health outcomes including those related to eating patterns in AA women (Fleury & Lee, 2006; Robinson, 2008). More importantly, failing to address other levels of influence such as social or community factors is likely a reason for poor health improvements seen in AA women and other groups (Fleury & Lee, 2006; Robinson, 2008). Culturally adapting evidence-based treatment may address this concern by using feedback from the population of interest and tailoring an intervention to account for their unique sociocultural influences. Importantly, cultural adaptation may enhance treatment for AA women with BE.

Purpose of the Study

The current research attends to a socioecological perspective by acknowledging sociocultural influences on individual behavior in BE among AA women, a group that experiences a high burden of this condition. More specifically, the purpose of the study is to create a culturally adapted evidence-based intervention for BE in AA women with BE. The conceptual model below (see Figure 1) guides the rationale behind the process of cultural adaptation.





The conceptual model adapted from Castro and colleagues (2010) depicted above describes the relationship between key variables related to effective treatment of BE in AA women. More specifically, the model highlights the unique sociocultural

considerations that are often ignored by effective treatments for BE. However, important difficulties may arise even before starting an intervention. Research shows that treatment engagement may also be a barrier for AA women as AA women have lower rates of treatment for BE than their White counterparts (Pike et al., 2001). Furthermore, AA women who do engage in treatment seem to be more similar to White women with BED (Grilo et al., 2005). Therefore, awareness, entry and retention of AA women with BE in treatment are processes that could likely be improved by understanding important engagement factors. The current study seeks to gain feedback from AA women with BE in order to adapt an intervention and make engagement and efficacy more likely for this population.

The importance of sociocultural values and beliefs is also evidenced by research detailing the distinctive experience of variables relating to BE among AA women. For example, AA women have an increased experience of both institutionalized and interpersonal oppression. This oppression may influence eating as an experience of trauma and as an experience of added stress, both of which are related to BE and increased consumption of food (Adamus-Leach et al., 2013; Groesz et al., 2012; Thompson, 1992). AA women also show variability in valuation of the thin ideal, which is regarded as an important contribution to the development of disordered eating (Henrickson, Crowther, & Harrington, 2010). Therefore, the automatic assumption of the importance of thinness may be problematic in this population. Another important aspect of the contribution of sociocultural factors may be the preference for eating and BE as the coping activity of choice. The literature highlights greater acceptance of a larger body size and the desire for a curvy frame (Beauboeuf-Lafontant, 2003). Additionally, eating

as a response to both positive and negative emotions may be more acceptable within this group (Hargreaves et al., 2002). In this sense, BE may be attractive as a socioculturally acceptable means of coping and a way to achieve the desired outcome of a curvaceous and larger frame (Perez & Joiner, 2003).

Measurement of each of these factors related to sociocultural influences is beyond the scope of this research. However, these sociocultural factors will be considered in the process of exploring adaptations to an intervention. This process will use feedback obtained from AA women via focus groups asking them to evaluate a BE intervention and the extent to which it addresses sociocultural factors related to BE. This method of gathering and incorporating feedback from key stakeholders of the population of interest is a popular method in successful culturally adapted interventions (Kong et al., 2014). As such, a similar approach will be used in the presented research.

Evidence-based Treatment for BE

The recommended treatment for BED is cognitive behavioral therapy (APA, 2012; Wilson et al., 2007). However, there are well-identified barriers for mental health care utilization among ethnic minority groups. These include the overrepresentation of AAs in vulnerable populations, preferences for different types of services other than specialty mental health, and both perceived and actual differences of effectiveness of available treatment (USDHHS, 2001). Utilization of treatment for eating disorders shows similar barriers. An ethnically diverse sample of women reported differences in demographics between treatment providers and consumers, as well pervasive stigma, social stereotypes, and beliefs about social norms as important contributors to poor treatment utilization for eating disorders (Becker, Hadley Arrindell, Perloe, Fay, &

Striegel-Moore, 2010). Additionally, ethnic minority women with eating concerns were less likely to have a provider ask about their eating or refer for treatment as compared to White women and reported financial burden as an obstacle for care (Becker, Franko , Speck, & Herzog, 2003; Cachelin, Rebeck, Veisel, & Striegel-Moore, 2000). These findings provide a rich context for understanding low treatment utilization and completion among AA women with BE.

Overcoming Binge Eating (self-help CBT), a self-help program created by Christopher Fairburn (1995), utilizes the principles of cognitive behavioral therapy to reduce BE. Self-help CBT has many benefits, including being well- studied, low cost, low intensity, publically available, and does not require the services of a specialist. Furthermore, self-help interventions may be less stigmatizing and empowering by giving users more control over the treatment process. Therefore, self-help CBT may address important barriers to care while providing evidence-based treatment This intervention aims to change an individual's maladaptive thoughts and behavioral eating patterns that are believed to contribute to BE. The manual is divided into two sections with the first section providing readers' education and information about BE and other disordered eating as well as the framework for the program. The second section includes six steps that guide readers through the process of changing their eating behaviors. Specifically, it includes: Step 1) Getting started: self-monitoring and weekly weighing; Step 2) Establishing a pattern of regular eating and stopping vomiting and laxative misuse; Step 3) Substituting alternative activities for binge eating; Step 4) Practicing problem solving and reviewing progress; Step 5) Tackling dieting and other forms of avoidance of eating; and Step 6) Preventing relapse and dealing with other problems.

One of the reasons for the effectiveness of self-help CBT may be that this intervention addresses many of the biological and psychological concerns associated with BE. Self-help CBT addresses the biological underpinnings of BE by attending to cravings and urges that often pre-empt and sustain BE, and encouraging participants to become more aware of physiological cues for both satiety and hunger. The intervention also helps participants create a regular pattern of eating with the goal of re-establishing normal eating habits. The intervention also attends to psychological processes, as it is based on the principles of cognitive behavioral therapy and seeks to modify behavior and related cognitive processes. Participants are taught to become more self-aware of thoughts and emotions that occur before, during and after BE episodes and those related to body image. Participants are also guided to identify alternative coping strategies and reduce shame associated with BE in order to improve mood, decrease stress, and improve likelihood for success in reducing BE.

Although the program is publically available and can be used singularly, self-help CBT can be completed in a guided format (CBTgsh) where supporters help to facilitate readers' progression through the program (Wilson & Zandberg, 2012). CBTgsh includes a face-to-face introductory orientation session, and 4 weekly (weeks 1-4) and 4 biweekly (weeks 5-12) sessions with a supporter to complete the program. This guided format has been shown to be more effective in reducing the number of BE episodes and reducing dietary restraint as compared to simply using the unguided self-help book (Loeb, Wilson, Gilbert, & Labouvie, 2000). CBTgsh is also more likely to result in abstinence from BE and reduction in dietary restraint, eating concerns, shape and weight concerns, and depression symptoms than treatment as usual (Striegel-Moore et al., 2010). Additionally,

CBTgsh is regarded as a beneficial first line treatment for BE, as response to CBTgsh within the 4th week of treatment is related to sustained reduction of BE (Hilbert, Hildebrandt, Agras, Wilfley, & Wilson, 2015). Unfortunataly, an important gap in the research on CBTgsh is use among AA women. A feasibility study of CBTgsh among a diverse sample found the intervention to be effective in reducing BE (Wells, Garvin, Dohm & Striegel-Moore, 1997). Moreover, participants reported high levels of satisfaction with the intervention and remarked that it was accessible, feasible, and allowed for increased autonomy (Wells et al., 1997). However, only 2 of the 7 participants were AA (Wells, et al., 1997). Furthermore, a later trial comparing CBTgsh to behavioral weight loss found CBTgsh to be more effective in reducing BE (Grilo & Masheb, 2005). However, only 2 of 37 participants receiving CBTgsh identified as AA (Grilo & Masheb, 2005). Similarly, a second study comparing CBTgsh to other treatment for BE had less than 20% of participants identifying as AA and found that minority participants were more likely to drop out of treatment (Wilson, Wilfley, Agras, & Bryson 2010). A final study includes a racial and ethnically diverse sample and explores the benefits of CBTgsh, medication, and combinations in reducing weight and BE in primary care (Grilo et al., 2014). However, findings show no long-term effects for either treatment approach and the authors hypothesize that the treatment setting and small sample size of racial and ethnic groups may have influenced findings (Grilo et al., 2014). Therefore, there is insufficient evidence to determine the effectiveness of this intervention among AA women. Cultural adaptation may make the intervention more appealing, accessible, and culturally relevant for AA women with BE. Nonetheless, the guided intervention has shown to have positive effects lasting at least a year, is

considered low cost compared to other typical psychological treatment, and has been viewed positively by those who complete the program (Debar et al., 2011; Wells et al., 1997; Wilson & Zandberg, 2012).

Overall, CBTgsh is an effective and useful intervention for BE, at least in majority groups. However, the intervention seems to have significant areas in need of improvement. One concern is that *Overcoming Binge Eating* does not speak to the sociocultural perspective of various groups. This is highlighted by recent research showing that a main reason for not completing CBTgsh was feeling that the program was not relevant or appropriate to the individual (Jones et al., 2012). Additional feedback from non-completers includes wanting to have more input into the content of the intervention (Jones et al., 2012). Therefore, CBTgsh may be improved by making the manual more relevant and specific for the intended population. This may be especially true in the case of AA women who have a unique experience of BE and group specific sociocultural influences that may contribute to BE. As described above, important adaptations may include addressing eating as coping for trauma and unique forms of stress, the role of the family and social context in food choices and patterns, and the cultural meanings and preferences for food. In sum, CBTgsh will likely be improved by addressing the sociocultural context of BE, in order to meet the needs of AA women with BE.

A Culturally Adapted Approach to CBTgsh

Parallel research among Latina women participating in CBTgsh has demonstrated the utility of conducting focus groups in the process of creating an effective culturally adapted CBTgsh intervention (Cachelin et al., 2014; Shea et al., 2012). Findings from this work indicate that the process of cultural adaptation did not require deletions to the treatment program, but rather the addition of important supplemental information such as how to handle sociocultural pressures regarding eating and body image, how to navigate family dynamics and family roles, a discussion of sociocultural specific foods, relevant scenarios for problem solving, and engaging in culturally accepted coping activities to replace BE (Shea et al., 2012). This prior work was used as a guide for the current research among AA women with BE. Specifically, the research used qualitative methods to gather feedback from AA women in the community who self-identify as having problems with overeating and meet criteria for BE on needed changes to self-help CBT that could be addressed in CBTgsh.

Specific Aims and Hypotheses

The goal of the current research is to elicit information from AA women in order to inform cultural adaptations to CBTgsh for use with a community sample of urban, AA women with BE (See Appendix A).

Aim 1: To obtain feedback from AA women with BED in order to make cultural adaptations to CBTgsh.

A community sample of 16 AA women with BE was recruited to participate in approximately five separate focus groups of at least three women each. The focus groups were conducted to determine the need for adaptations to CBTgsh.

Hypothesis 1: Focus group participants would suggest the need for changes and provide recommendations for adaptations to the standard CBTgsh.

Aim 2: To organize feedback from participants of the study and inform potential changes to the intervention for use with AA women with BE.

Data gathered during the focus groups were used to suggest specific adaptations to CBTgsh for use with AA women with BE.

Hypothesis 2: Feedback provided by participants of the focus group would be of sufficient detail to suggest meaningful adaptations to the standard CBTgsh. Importance of the Study

The overarching goal of the current research is to improve treatment for AA women with BE. Research highlights limited engagement in treatment interventions, differences between those who seek treatment and those who do not, and a unique experience of BE among AA women. Implementing cultural adaptations to evidence-based treatment will contribute to meeting the needs of AA women who experience BE. Support for this claim comes from research findings that emphasize the benefits of culturally adapting interventions and feedback from former participants of CBTgsh indicating the need to modify it to make it more personally relevant and appropriate. Additionally, while evidence-based treatments have been shown effective in minority populations, considering cultural factors may increase "buy-in" and satisfaction for AA women (Miranda et al., 2005). Therefore the current research to culturally adapt CBTgsh may improve buy-in, increase access and utilization of treatment, and reduce BE in AA women.

Beyond the benefits to AA women with BE, the current study adds to research on the process and benefits of culturally adapting interventions for use in various sociocultural groups. There is inadequate data regarding the appropriateness of CBTgsh for use with AA women (Grilo et al., 2014; Grilo & Masheb, 2005; Loeb et al., 2000; Wells et al., 1997; Wilson et al., 2010). However, the intervention has already been used in racially and ethnically diverse samples. Nonetheless, prior feedback from participants of the unadapted intervention highlights areas for improvement that could and likely would be addressed through the process of cultural adaptation for specific sociocultural groups. Furthermore, parallel research among Latina women shows the benefits of culturally adapting CBTgsh (Cachelin et al., 2014). Therefore, the current study exploring the process of cultural adaptation will add to the current discourse of adapting interventions for more targeted use.

An additional implication for the presented research is addressing sociocultural factors as important influences on health and health behaviors. Regrettably, sociocultural factors are often neglected in traditional research and interventions. However, the current research provides a starting point for how to conceptualize and create interventions that are culturally appropriate.

Summary

BE, a specific type of overeating, is characterized by a pattern of consuming unusually large amounts of food in a discrete period of time combined with a sense of loss of control (APA, 2013). While research suggests similar rates of BED in White and AA women, AA women report more frequent BE episodes and a more recurrent pattern of BE (Pike et al., 2001; Striegel-Moore et al., 2003; Taylor et al., 2007). Although treatment is indicated for BE, few AA women seek treatment. Those seeking treatment are significantly different than non-treatment seeking AA women with BE (Grilo et al., 2005). One reason for these findings may be a lack of acknowledgement of sociocultural influences that shape experiences and behaviors related to BE. This seems likely in the case of AA women, as researchers highlight how cultural ideals of strength, rejection of the typical thin-ideal, food and taste preferences, and experience of distress and discrimination can be linked to eating patterns and engaging in eating as a coping strategy (Adamus-Leach et al., 2013; Beauboeuf-Lafontant, 2003; Davis et al., 1999; Davis et al., 2005; Perez & Joiner, 2003; Thompson, 1992). Therefore, acknowledging and incorporating sociocultural factors may improve AA women's likelihood to engage in treatment and help to improve outcomes (Griner & Smith, 2005). Culturally adapted and effective interventions meet the need of acknowledging these sociocultural factors and producing expected results. However, there is a lack of culturally adapted interventions in the field that meet the needs of minority communities (Griner & Smith, 2005). The current study aims to begin the process of culturally adapting an evidence-based treatment for AA women with BE to reduce BE.

CHAPTER 3: RESEARCH METHODS

Methods

Culturally adapted interventions are informed by specific sociocultural influences such that the intervention is compatible with the values, beliefs and behaviors of a population of interest (Bernal, Jiménez-Chafey, & Domenech Rodríguez, 2009). The present study aims to explore cultural adaptations for an evidence-based treatment for BE. While there is some debate about the best process for cultural adaptation, commonalities show a stepwise process utilizing both qualitative and quantitative methods (Castro, Barrera Jr., & Steiker, 2010). The current research follows a five-stage model as described by Barrera and colleagues (Barrera, Castro, Strycker, & Toobert, 2013). The first stage involves information gathering and determining whether cultural adaptations are indicated. The literature review and rationale in Chapters 1 and 2 highlight the findings from this process. Key findings include: 1) the differences and correlates of BE symptoms between AA and White women; 2) the small number of AA women who seek treatment for BE; and 3) a need for personally relevant and culturally informed interventions. Stage one of the process of adaptation has already been completed and indicates cultural adaptations are likely necessary and may be beneficial for improving treatment for this group. The second stage of the adaptation model describes a preliminary adaptation design where opinions are

gathered from potential participants and the intended treatment is adapted based on feedback (Barrera et al., 2013). The current research utilized focus groups and qualitative data to determine potential changes and suggest adaptations to the CBTgsh intervention. Steps three, four, and five of the adaptation process include pilot testing the preliminary adaptation with a small group of individuals from the target population, further refining of the intervention using feedback from preliminary tests, and a full cultural adaptation trial determining effectiveness and the influence of the intervention on the desired outcomes (Barrera et al., 2013). The third, fourth, and fifth steps of the cultural adaptation model are beyond the scope of the current research. However, future research can extend the reach of the current study and complete the process for culturally adapting CBTgsh for AA women with BE. An overview of the methods employed for this study is provided below.

Overview of Research Design

The purpose of this study is to gain information to guide the cultural adaptation of the CBTgsh intervention. This goal was accomplished by gathering feedback from AA women with BE on the CBTgsh intervention. The research design follows a process used to culturally adapt CBTgsh for use in Latina women (Cachelin et al., 2014; Shea et al., 2012). A total of 16 AA women with BE participated in one of eight focus groups (n total=16; average n per group=2) to solicit feedback on CBTgsh. Participants were originally recruited from local community organizations and the UNC Charlotte campus in Charlotte, NC. The sites were chosen to maximize recruitment of urban, AA women as this population represents a large proportion of those served by these organizations. Furthermore, the UNC Charlotte campus has a large AA presence with more than 21% of non-faculty staff identifying as AA (UNCC, 2013). Flyers were placed at community events and on the UNC Charlotte campus, inviting individuals to participate in the study. During the course of data collection, the author was presented with a unique opportunity to recruit for this study in East Tennessee. Including a different state allowed for greater generalizability of findings and assessment of potential geographic influences on cultural adaptation needs. Therefore, flyers were also placed in the Knoxville, TN based clinics of Cherokee Health Systems, a large federally qualified health system in Tennessee.

Potential participants were screened to determine if eligibility criteria were met. Eligibility criteria: participants must be at least18 years old and not older than 55, selfidentify as both female and African American, have a body mass index of ≥ 18 , and meet diagnostic criteria for BE. Participants were not eligible if they were currently pregnant, had been diagnosed with a serious medical condition with strict dietary recommendations, were currently receiving treatment for an eating disorder, or had a cognitive or other neurological impairment. Participants in the focus groups read selfhelp CBT and provided thoughts and opinions on general likes and dislikes of the manual as well as the match between the manual and sociocultural values and ideas. Questions used to elicit this information included: 1) What did you think of the program/manual?; 2) What did you like about it? Why?; 3) What did you dislike about it? Why?; 4) What was least helpful about it? Why?; 5) What was most helpful about it? Why?; 6) Would it work for you? Would it work for other women? Why or why not?; 7) What culturally relevant themes should be incorporated into this program/manual?; 8) What are some of the cultural values, traditions, or beliefs that would be important and relevant to consider when you or someone similar from your ethnic-cultural group was to use this

program/manual?; 9) Would you follow it?; 10) Would you recommend it to a friend? Why or why not?; 11) What changes or improvements would you make?; and12) How can we motivate African American women in the community to voluntarily use this program/manual? Similar questions have been used in prior research to elicit information about cultural adaptation (Shea et al., 2012). Responses to these questions and other dialogue during the group were analyzed using thematic content analysis (Green & Thorogood, 2004). Themes generated from the content analysis process were used to suggest adaptations to the CBTgsh intervention. For example, if participants collectively report that aspects of the intervention seem irrelevant, then that information was suggested to be removed from the manual. If participants highlight that the intervention does not address family meals and celebrations, then information about how to talk with family members about their lifestyle changes was suggested as an addition to the manual.

Overview of Data Collection Protocols and Procedures

The institutional Review Board of UNC Charlotte and Cherokee Health Systems approved this study. Potential participants who called to sign up for the focus group study were screened for eligibility to see if they met BE and other eligibility requirements (see eligibility criteria above). If eligible, they were invited to participate in focus groups with a goal of 5 participants in each group and asked to give preliminary verbal consent by responding "yes" when read a short paragraph about the study. The focus groups were conducted on the campus of UNC Charlotte in Charlotte, NC or a community conference room of a Cherokee Health Systems clinic in Knoxville, TN. Each participant was mailed a copy of *Overcoming Binge Eating* (self-help CBT) by Christopher Fairburn (1995) and a consent form, and asked to read the manual in its entirety before the

scheduled focus group. In order to give participants sufficient time to read the text, the book was mailed out approximately three weeks before the scheduled focus group. Additionally, participants were instructed both verbally after initial enrollment and on the mailed consent form to read the book and reflect on questions that will be discussed during the focus groups. More specifically, participants were prepped that they will be asked to discuss if the book was helpful/unhelpful, relevant/irrelevant, and their general and specific likes/dislikes about the content, presentation of information, and overall tone of the book, to remind participants of the impending focus group meeting, and to maximize retention of the focus group sample. However, no support or guidance relating to the information on treating BE presented in the book was given. The day before their scheduled focus group, members of the research team confirmed participation via a phone call.

The author served as the group facilitator, a note taker and primary coder of the group data. Focus group procedure specifies the importance of a facilitator who is able to listen and probe effectively, as well as manages group dynamics (Wilkinson & Birmingham, 2003). The author is experienced in conducting focus groups and is familiar with self-help CBT to allow for sufficient exploration of the content. Furthermore, the author is also an AA female, which may make participants more comfortable discussing sensitive topics as cultural congruence can improve AA participation in research (George, Duran, & Norris, 2014). The facilitator began the focus groups by explaining the purpose of the study, the schedule for the 2 hours, and answering any questions participants had about the study. Those who agreed to participate provided written consent. After

obtaining informed consent, each participant chose a name they wanted to use during the study on a card in front of them. The facilitator audio-recorded the focus groups and took notes, referring to participants by their selected name. The focus groups were semi-structured and participants were directed to share their experiences reading through the book and their opinions on the programs. Specifically, the questions focused on the programs alignment with the participants cultural beliefs and values, ways to modify the program to better align with these beliefs and values, and how to make the program more accessible and feasible for AA women. The facilitator encouraged participation from each woman and summarized points that were made. During the focus groups, each participant completed a very brief demographic questionnaire to obtain additional information on treatment seeking, health insurance, and SES, and a disordered eating questionnaire to further explore eating practices. Participants who completed the 2-hour focus group received a \$30 store gift card (see Figure 2).

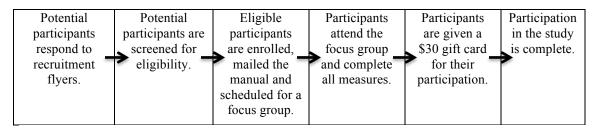


Figure 2: Flowchart of study participation.

Measures

Eligibility Screening: Participants for the focus groups reported their age,

race/ethnic background, height, weight, and experience of BE (at least 1 BE episode per

week for the past three months) (see Figure 3).

Demographic Questionnaires: Participants reported their age, level of education, relationship status, occupation, household income, height, weight, insurance coverage and prior and current treatment for disordered eating.

Disordered Eating Symptomology: To further assess BE behavior, participants were asked to complete the Eating Disorder Examination Questionnaire, 6th edition (EDE-Q; Fairburn & Beglin, 2008) during the focus group. The EDE-Q is a valid and reliable measure of BE symptomology, eating concerns, weight and shape concerns, and compensatory behaviors over several time periods including the past 28 days (Berg et al., 2012). Individual item responses on the EDE-Q were summed and scored to determine a Total Score and 4 subscale scores: Restraint, Eating Concerns, Shape Concerns and Weight Concerns (Fairburn & Beglin, 2008). The Restraint subscale includes items assessing restricting and avoiding eating, excluding specific foods, following strict dietary rules, and desire for an empty stomach. The Eating Concerns subscale assesses preoccupation with eating, a fear of losing control over ones eating, desire to eat in secret, feeling guilty about eating and concern about eating in social contexts. Shape Concerns and Weight Concerns share an item assessing preoccupation with shape or weight. However, Shape Concerns also includes items concerning feelings of fatness, the importance of one's shape, feelings of dissatisfaction with shape and discomfort seeing one's body. Moreover, Weight Concerns focuses more specifically on the importance of weight, dissatisfaction with one's weight, and specific desires to lose weight. For both the Total Score and Subscale Scores, range of possible scores is between 0 and 6, with higher scores indicating greater severity of disordered eating symptomology (Fairburn & Beglin, 2008). The EDE-Q has a test-retest reliability of BE behaviors ranging from .51 to .92

(Berg et al., 2012). This measure can be completed in about 15 minutes and has a high concordance with more thorough examinations of BE symptoms (Berg et al., 2012).

Pre-Focus Group Measures	Focus Group Measures
Eligibility Screening	Demographic Questionnaire
	Binge Eating Symptoms (EDEQ)

Figure 3: Study measures.

Overview of Data Analysis

Quantitative Analysis

Descriptive statistics were conducted to determine the demographic characteristics of focus group participants using SPSS Version 22 (IBM, 2013). Analyses were conducted for the sample as a whole, as well as for the represented geographic areas.

Qualitative Analysis

Data gathered during the focus groups was managed using NVIVO Versoion 10.2.1 (QSR International, 2015). Each focus group was audio recorded and transcribed by the author and members of the Women's Health Project research lab at UNC Charlotte, in Charlotte, NC. After transcription, focus group data were analyzed using thematic content analysis (Green & Thorogood, 2004) to identify important themes and areas for adaptation to the original CBTgsh manual. This analytic strategy helped to ensure that all themes gleaned from the data actually come from participant opinions gathered in the focus groups. Data analysis procedures followed general focus group guidelines (Wilkinson & Birmingham, 2003). Moreover, the author consulted an expert in qualitative methods who recommended the following procedure based on the aims of the study (Dr. Jan Warren-Findlow, personal communication, June, 22, 2015): 1) Focus groups were analyzed by the author to develop a code book, including the definitions and boundaries of each code; and 2) Members of the research team used the code book to independently code at least two focus group transcripts. An agreement of at least 80% (Kappa = .80) is considered the general standard for consistency for coding and was the minimum acceptable level for this study (Fleiss, 1981; Landis & Koch, 1977). Disagreements between coders were resolved through focused discussion until a consensus was reached about the portion of data in question. This process ensured the strength and robustness of the codes and codebook, which were used to inform relevant themes. Information from the thematic content analysis was used to summarize focus group feedback and suggest relevant changes to self-help CBT and the CBTgsh intervention.

Summary

The described research seeks to explore the need for culturally adapting an evidence-based treatment for BE and to suggest potential modifications to the intervention for use with AA women with BE. Although there are different methods proposed for culturally adapting treatment, the current study follows the model proposed by Barrera and colleagues (2013). As stated earlier, the entire 5-step model for cultural adaptation is beyond the scope of the current research. However, the first two steps of the process are undertaken with the completion of this research, as described above. The present study utilizes quantitative and qualitative methods to effectively meet the research goals, explore the stated hypotheses, and ultimately detail the initial processes of culturally adapting evidence-based treatment for AA women with BE.

CHAPTER 4: RESULTS

Quantitative Results

Participant Screening and Recruitment

A total of 50 women were screened for the study. Thirty-four women (68%) met eligibility criteria and 31 participants were enrolled and scheduled for a focus group. Of those scheduled, almost half (n=16; 32% of those originally screened) attended and participated in one of eight focus groups (see Figure 4). Non-participants who were scheduled for focus groups but did not attend had a mean age of 33.20 (SD=13.03) and an average BMI of 33.18 (SD=9.52). Demographic data for participants are summarized below.

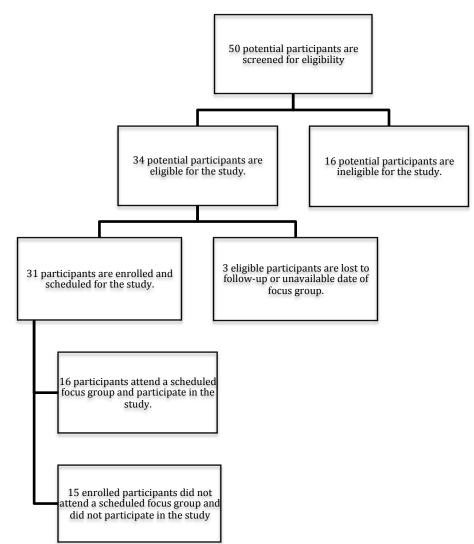


Figure 4: Flowchart of participant recruitment.

Participant Demographics

Sixty-nine percent of participants (n=11 out of 16) were recruited in Charlotte, NC. Participants were an average age of 38.06 years (SD=12.49) and lived in a 2.19 (SD=1.34) person household (see Table 1). A little more than half of participants were single, with 37.5% married or living as married (see Table 1). Fifty-six percent of participants had children and all participants had at least some college education ("Some college or 2-year degree"=43.8%; "Four year college degree"="31.2%; and "More than 4-year college degree"=25.0%). Three quarters of the sample were employed (75%) and most participants had a household income of less than \$25,000 (33.3%) or \$25,000-\$49,000 (33.3%) (see Table 1). Close to ninety percent of participants had insurance coverage at some point in the last five years (87.5%) with an average of 48 months of coverage (SD=19.03). Finally, participants were obese with an average BMI of 36.14 (SD=12.68) (see Table 1).

Participant Eating Behaviors

Despite responding to flyers about problems with overeating and meeting eligibility criteria, 25% of participants felt they have never had a problem with eating as indicated on the demographic measure. A majority of participants currently (37.5%) or previously (37.5%) wanted help for eating problems (see Table 2). However, only 6.3% had ever received any treatment for an eating concern (see Table 2). Of those who did receive treatment, nutritionists and psychiatrists were listed as the source of treatment for those eating problems.

Participants were screened and verbally confirmed having at least one BE episode per week for the past three months. However, self-report of eating patterns on the EDE-Q (Fairburn & Beglin, 2008) was inconsistent with data collected during the screen, as three participants reported no objective binge episodes in the past 28 days. As a group, participants reported an average of 5.27 (SD=5.01) BE episodes on 4.27 (SD=5.41) days in the last 28 day period (see Table 2). Potential explanations for this discrepancy in selfreported binge eating will be explored below. Participants denied any vomiting in the past 28 days, but reported 4.00 (SD=7.52) days of laxative use and 5.27 (SD=7.34) days of driven exercise within the same time period. Participant scores on the subscales of the EDE-Q were highest for Shape Concerns and Weight Concerns (M=4.25, SD=1.32; M=4.03, SD=0.89; respectively) as compared to Restraint (M=2.61, SD=1.41) and Eating Concerns (M=1.81, SD=1.33) (see Table 2). The EDE-Q Total Score was 3.22 (SD=0.87). Compared to a large sample of treatment seeking women with BED (Aardoom, Dingemans, Slof Op't Landt, & Van Furth, 2012), participants in this study are at the 40th percentile rank for severity of symptoms. Therefore, participants in the study report moderate disordered eating symptomatology.

Qualitative Results

Focus Group Findings

Sixteen women participated in a total of eight focus groups (average n per group = 2; range per group = 1-3 participants). Two of the focus groups had only one participant, which is an interview rather than a dynamic group where participants can respond to thoughts and ideas stated by other members of the group. However, data from these two participants essentially mirrors data provided in the other groups. Therefore, data from the interviews has been combined with other group findings. The codes created from the qualitative data are listed in Appendix B. Consistency of the coding between the author and 2 members of the research team are 99.5% and 97.7%, respectively. Coded data were used to generate broad themes across the focus groups. The aim of the current research was to identify specific feedback regarding the appropriateness of the self-help CBT for treating BE in AA women. However, the nature of the content sparked a dialogue on broader ideas about cultural beliefs and values regarding eating habits as well as targeted feedback about the book. As a result, the data collected provides a rich

context for suggesting changes to self-help CBT. A description of themes (See Table 3) and representative statements from participants is below. Participant statements have been minimally edited, such as punctuation changes and removing of "umms" and "uhs", to help with readability. However, extreme care was taken to keep the original feel and flow of participant statements, and as much of their verbatim feedback as possible. Theme: Awareness (including self-awareness) of BE behavior

Participants of the study were self-selected into this research by responding to flyers asking: "Do you obsess about food? Do you overeat or eat in binges?" However, a common theme among participants was a lack of awareness about BE and being unaware their eating habits meet criteria for BE. Several participants made statements about not realizing they engaged in BE until reading the definition. Yet others maintained the definitions did not fit them, despite meeting criteria during screening. Participants may not see BE as problematic or may have different cultural perspectives of overeating and what is considered unusually large. Moreover, there is a seeming lack of awareness of what kinds of eating and compensatory behaviors are clinically significant concerns and that these concerns may describe eating patterns seen within this group.

I don't think if you look at African American women, I don't think they would, ... I don't think they think they binge. They just think we eat too much. So this book may bring to the forefront the fact that you are binging, because other than that, I don't think we are going to call it that. We do it a lot... I just don't think an African American woman is literally going to think "I binge. (Participant from Focus Group 1)

I didn't know that we binge eat, like we always like to eat, anytime [my kids] get an A in school or anything happy we eat, if it's sad, we eat. It's just like, for real we go to all the buffets and we know [they think], "oh god, here come that big lady and her kids", and we are like the Clumps. And we eat until we can't eat any more. (Participant from Focus Group 8) Because you know from what you see on TV from people overeating, it is just a gorging thing. I would never think that eating a pack of cookies is a binge. (Everyone nods in agreement). (Participant from Focus Group 1)

There were parts I wanted to skip because I felt like they weren't relevant to me. In particular, like the...well I'm not a purger or I don't use laxatives and that kind of stuff and I don't know if that is typical for all black women but that was not something I was going to do. The binging, sure. (Participant from Focus Group 2)

Me personally, I felt like with anorexia and the binge eating, I guess the definitions that they were giving I couldn't relate to it because I never like had episodes that they are describing, but I've had what I consider like episodes of binge eating. Yes it kind of made me, I don't know how to explain it, I don't know if I feel like I just don't fit the description that they are saying, but I know from personal experience. Like the over eating, I think that's what it's called, not the binging but the compulsive overeating. I felt like I related with that definition more than anything, but everything else I felt distant from it. (Participant from Focus Group 4)

I know girls who do the same things I do, and there's no real name for it, because they won't actually go the bathroom and vomit like you see in movies or like a TV special and they're not anorexic and they don't look anorexic and don't look completely overweight. So they kind of fall behind the cracks and there's nothing really saying, "This is what I see you doing. This is what I see you eating. [These are] the places you go. This is how you feel when you do it." So they kind of feel like, it's not them, it's somebody else. But it might be them, and if they saw themselves in the problem, maybe it could help them. (Participant from Focus Group 5)

I have a family member that [purges] and I didn't know that was what that's called. We're thick on my side. She would always say, "Well I don't want to be thick" and we would always see her eat a whole bunch, and say "Why is it she doesn't get fat." But then at night we would hear her throwing up and stuff. Like I didn't ever know it was a name for that until I read this book. (Participant from Focus Group 8)

One potential explanation for the lack of awareness of BE in AA women is the

relative privacy of BE. The influence of family on eating practices will be further

explored below. However, it is likely that BE within this group is kept private, with the

exception of close others who may engage in similar behaviors.

People typically that binge, they hide (everyone agrees). (Participant from Focus Group 1)

I feel like in a lot of self-help books they say write this journal and to be honest if you are a binge eater, just from personal experience like doing something, I'm not going to write it down. If I ate 6 cookies, I might write cookies. Period. I won't tell how many I ate. And then it's like out of sight, out of mind. It's already happened. I'm not going to admit to it. I'm just going to forget about it. So the food journal to me it's like, if you really have a problem with eating are you really going to write it down? You know? If you are ashamed to do it, are you going to sit there and write it? Probably not. (Participant from Focus Group 2)

I get kind of embarrass[ed] though, but I will I'll go and get everything that I want to eat. Like [another participant] called it snacking, I call it snacking too. I don't stop until I have to make myself stop. ... I can feel comfortable with you all but I may be in another setting with a Caucasian woman where I might feel uncomfortable. I do realize that that all starts with me, but there is a difference" (Participant from Focus Group 3)

Being an African American woman, we're not one to reach out to a lot of the outsiders. So a lot of us would want to incorporate like family members or friends to help. Because we feel like going to that third party is like, ok, we're saying that we really have this issue. So we're not one to reach out, but if we have that extra family or friend, we would want to do it more and not feel like we have a, as they say, a true problem. (Participant from Focus Group 7)

As indicated above, participants felt disconnected from widespread perceptions of

BE and disordered eating habits. When BE is private, it may be easier to assume it does

not exist. An additional possibility is that ideas about eating, weight, and shape may vary

among AA women, as compared to typical standards of beauty. Furthermore, BE may not

seem problematic if it is common within the social and cultural group. This idea, as well

as general standards and expectations of beauty, will be further explored below.

Theme: Cultural views of shape and weight

Stereotypical expectations of the "thin ideal", or preference for a slim and slender frame, are quite prominent. While participants were aware of this standard, there were many statements of this expectation not being relevant for AA women's body image.

Results show participants did not value thinness and were content with not ascribing to

this standard.

Black women are, we're known to be larger women, curvier women, [and] in some places that's okay. When you compare a black woman my size to a White woman [my size], there's going to be an image difference. So I think that's important to realize. At the end of the day you just want to feel satisfied with you. You want to feel comfortable regardless of the images that have always existed; be comfortable with me. (Participant from Focus Group 3)

It's like how they said, like girls see girls in magazines and they want to look like that. I mean I never had that. I was like "they are professional. I'm not, so I'm not going to look like that no matter if I was her size." You know my makeup is not going to look like that, my hair is not going to look like that. You know? In my head I always knew it's not going to happen. (Participant from Focus Group 2)

We're not all going to look alike even if we're at that ideal weight. To show that we're not trying to, let's see, we're not trying to fit the, I'm trying to put it in good words, so hard to put it to words, we're trying to get our own image and we're not trying to be someone else's image... We're not going to be that size because we're built differently. (Participant from Focus Group 7)

Women in this study articulated an interesting dichotomy. They described

rejecting expectations for thinness or a smaller frame, however, there were other

standards of beauty described, particularly greater acceptance for a larger frame. Other

statements describe pressure to feel "put together" at all times, regardless of one's weight

and shape. This suggests that standards of beauty do affect AA women. However, the

specific standards may be largely culturally dependent. As an example, women described

pressure for achieving curves and always looking their best, perhaps as a result of trying

to balance not ascribing to the "thin ideal".

I think right now in the African-American community especially with women, there's an obsession with a new body type, which is really influenced by like rap culture and hip hop culture and it's that curvy, thick, waist training type of big butt slim/thick kind of body. And I don't know if that's even addressed with health problem[s] because girls who want that kind of body still have health problems, but there's an assumption they just want to be thin. And I think them doing new things that could be equally damaging, but there's no help when they want a different body type so they're doing different things. So I think [body image] is like evolving....[the book] assumes you want to go down [in weight] to be thinner. (Participant from Focus Group 5)

Some African American males love the fact that they, they want a big girl... They [will] tell you in a heartbeat, "what I'm gonna do with a back bone when I can get a rib". I mean, I'm just telling you. (Participant from Focus Group 6)

It's like I feel good. I'm healthy. But that doesn't matter [because] you don't look good. So yeah I think there is a thing in our community that we care how we look more than you know [weight or size]. (Participant from Focus Group 1)

In whatever shape that is we care how we look and to please others because if I didn't have to please others I would never wear makeup to work, I would never get my hair done, and I would wear jeans every day. But it doesn't make the society around us comfortable. (Participant from Focus Group 1)

I guess being in America you have an added negative thought of your esthetic on top of just being an American girl. Being so hard on your weight and then like, then being African American adds another factor. (Participant from Focus Group 5)

Interestingly, women also suggested that this acceptance of a larger frame may

prevent women from recognizing or labeling BE as disordered eating. In other words,

since BE is compatible with a desired outcome of being larger or curvier, it may be more

acceptable. Additionally, women described how being larger can be comforting, as

important key figures in an AA woman's life may be more likely to be larger.

But I found it very interesting that areas of the world that have African Americans or even Latinos, Spaniards, Italians whatever, they do not suffer from that because in those cultures, they want you to have some curves. It is only the northern Europeans or maybe areas that are predominately Caucasian that want you to be the number 2 pencil type shape" (Participant from Focus Group1)

Like for instance in the African American community we have like big momma and grandma, and so it's, it's a comforting thing to have your mother be big or have your grandmother be big, and so you know just overcoming, or just talking about, what did I say before, those type of things culturally, or stigmas in the African American community that make it a positive thing. Or the support, other people supporting the habit, and telling you binging is okay and not a problem, and bringing food to you, and things like that, I see that a lot. (Participant from Focus Group 6) Preferences regarding shape and weight seem to be a much more complex consideration than typical ideas about women wanting to be small and thin. Women participating in the focus groups described not wanting to look like the stereotypical expectations of beauty, but described their own culturally relevant pressures, such as having a curvier, voluptuous shape, and presenting as polished at all times. Moreover, the behavior of BE is not necessarily incompatible with goals to achieve or acceptance of a larger frame. Treatment targeting BE behavior among AA women likely needs to acknowledge these unique pressures and cultural expectations.

Theme: Influence of family on eating practices

One of the earliest and most prominent teachers an individual will have is family.

Therefore, family plays a significant role in how food is both prepared and eaten (Davis

et al., 1999, Davis et al., 2005). Participants in the focus group also discussed the

influence of family and loved ones as it relates to BE.

I think [overeating] is big in the African American community. 'Cause it was saying go out with friends and family to avoid that, and I think that is a trigger for us because we do eat socially and with family, and we have the big holiday meals and we cook a lot. (Participant from Focus Group 6)

Do you suppose that's because of the culture? It's cultural that we eat. There is, there's a soul food Sundays where your families gather and you eat that food. So has it always been?... I wouldn't suspect that White women, I would never suspect that White women eat more than Black women. But I would think that there are more bingers in White women, and bulimia, and that sort of thing. (Participant from Focus Group 3)

I know the big thing like growing up is like eating as you cook. Like you're cooking, you're eating, you're cooking, you're eating. Then you sit down and have the meal and then if there are leftovers you sit in the kitchen with all the other women and you eat the leftovers. Like that was normal. Like I saw that all the time and most of my friends and family and things like that. That's normal. That's what the ladies do. We cook and eat. And then we eat with the family and then we get up and eat the leftovers sitting around. You know, we finish the cake

and just talking and just whatever. So, yeah like she said it's not the women with the table full of food just scarfing it down. To me that's binge eating because you're kind of like obsessed. [But African Americans eat] because people want to get rid of the food. You don't want to put it in the fridge. Let's eat it, let's eat it, let's eat it. And then later on when you do feel bad like "I ate a lot tonight." You don't realize you ate that much because you're socializing. You know? I was just being social. I was with the other ladies. (Participant from Focus Group 2)

I think in the African American community we make large quantities of food. Just an example, I grew up, you know my best friend was White and I would go to her house, they would only have enough for that meal for everybody there. So if it was four people, there was four steaks, it was a portion of four potatoes and you know that was it. And we make like large quantities, cause we have large families a lot of times, but even above and beyond that, and then it goes in the refrigerator, so there is more of that temptation to come back later at night when everybody is sleep and eat the rest. (Participant from focus group 6)

Prior research highlighted how changing ones eating can be seen as a rejection of

cultural values and traditions (James, 2004). Therefore, as AA women are completing

treatment to change BE patterns, they may receive negative feedback from family and

friends. Discouragement from loved ones when making changes is confirmed in

participant statements below.

And see, you've got those people that don't want you to succeed too. So when you're doing the conversation there, make sure, you know, to remind them your family members may be against the idea of you trying to lose weight, trying to do what's good for your body. (Participant from Focus Group 6)

You don't want someone to be non-encouraging if it's not going well. You know, sometimes I get more support from outsiders than inside. (Everyone agrees). (Participant from Focus Group 1)

I feel like when it comes to family, I think that's like a family discussion. Like okay, well where are we? You know, do we want to improve our health? Or do we have to, you know, [change] the way we're eating now? Yeah, I feel like that's a family discussion kind of thing. (Participant from Focus Group 4).

Family is an important support in making any change, particularly among AA

women. Therefore, it may be useful to discuss how to get support from family and loved

ones when embarking on change. Self-help CBT does mention the importance of

explaining to family the goals of treatment if they may hinder progress. However, for AA women this may be a more stressful conversation, as eating practices are an entrenched cultural tradition.

Theme: The meaning of food

An interesting topic during the focus groups was the idea of food as a reward or an incentive. For example, in the statements below, participants highlight the use of food in being enticed to behave as a child or feeling as if food is a reward after making it through another day. Similarly, participants discussed the meaning of food as a symbol of love, and having loved ones cook for them as a sign of appreciation. This enhanced meaning of food, beyond simply a source of energy, means that efforts to influence eating should consider the symbolic significance.

But you think about it, when you're growing up, your mom would give you a cookie. Either give you a cookie in order to either behave or as a reward because you did behave [everyone nods in agreement]. (Participant from Focus Group 1)

They eat a lot and they want you to eat because that is a form of love to them. That's a form of affection. (Participant from Focus Group 1)

Additionally, participants discussed potential reasons for why food is such a

valuable resource. One such reason is the lack of other resources that could be used to

purchase items or gifts. Participants discussed the meaning behind providing food, as it

may have been the only resource readily available. Other participants described food as a

scarce commodity that should be indulged and eaten whenever available.

A lot of times all they have to give you was something to eat. They couldn't afford the other luxury. So, for you not to eat...you needed to eat and that starts the eating, eating, eating, eating. (Participant from Focus Group 1)

I always just remember not having nothing to eat growing up. That's just with me. And I just said when I have my kids I'm going to make sure my kids got plenty to eat. That's why I do hair and keep kids and make sure they got everything. They eat; we just like food. (Participant from Focus Group 8)

You have to share a lot in big families. So food takes on this kind of like ownership piece. Like I just want something for myself, especially if you don't have space for yourself or you're in a cramped apartment or you didn't have a lot of food growing up. When you can get your hand on cheap food, you just kind of want to like -- not greed, but you want to like hold on to it. I don't know. I think that's stems from being a little bit poor growing up. (Participant from Focus Group 5)

A related idea is the standards and expectations for accepting food that is offered.

With food being a valued commodity, it is understandable that it may be considered rude

or poor taste to refuse a food offering. Participants in the study confirmed this idea.

Women described how one is expected to accept food when offered, similar to any other

gift received.

If it is family, it can be an insult to them if you don't eat because then again we are back to that is all they have to offer you. And you are right. They want you to sit down and eat it. And it has been the case where you could go Thanksgiving-Christmas time from family member to family member and you are eating at every house you go to and you're just like "what in the world am I doing?" (Participant from Focus Group 1)

You always ate what was put in front of you. You didn't complain about it you just ate and you had to clear your plate before you left the table, and that is still with me. It's been years and years since I sat at a table with my parents and siblings, [and] it's still engrained in me. (Participant from Focus Group 3)

Someone else makes [a plate] for you and you're like, oh they made me this plate of everything and stacked it up to the ceiling. I should eat it all, because I don't want to waste the food; and that's another thing, wasting food, you don't want to waste it so you're like I'm just going to eat it all and then you stuff yourself. (Participant from Focus Group 4)

Like I said, I get offended as a host if I don't see people eating all the food. If I'm still left with a lot of food I'm like "people didn't like it." You know? I'm like upset. I'm like "you guys are taking this home. Someone is going to eat this food." So I mean maybe that's just a highlight. There was nothing about that in this whole thing. (Participant from Focus Group 2)

The quotes demonstrate the deep meaning of food, whether a gift of love or a sacrifice of already limited resources. In both contexts, accepting food that is offered is an important consideration for women trying to limit overeating and reduce opportunities for BE. Addressing the meaning of food and how to have conversations with loved ones about food choices and eating habits is an important inclusion for use of CBTgsh among

AA with BE.

Theme: Influence of income

Findings presented earlier discuss the meaning of food, particularly in an environment of limited resources. However, participants discussed how income also influences the implementation of perceived lifestyle changes. Common statements discussed the influence of income on food choices and trying to establish a healthy diet. Other statements indicated the benefit of discretionary income in engaging in physical activities and other healthy habits.

[The manual should include] things that are economical, you know for every African American woman, on a low budget or a high budget you know. I think in our communities that can be the biggest issue, not having the resources to get the healthier foods. Or having those binge type foods because they are easier to get. It's much cheaper to buy cookies, chips, cakes, and it's quicker to make, you know, than salads and things that take more time to make. (Participant from Focus Group 6)

I go to Wal-Mart and I'll buy the six packs of apple fritters. I vividly remember in reading this chapter I thought "You know what? I'm just gonna buy one." They have the case where you can go and just get one that's what I did, and I didn't like that it was good for me; that I only had one, and not two or three. But for one thing cost wise it wasn't effective for me. I paid a dollar for one whereas I get six for two dollars and fifty cents. (Participant from Focus Group 3)

Like weight loss and fitness is an entire budget item in my life. I belong to two different gyms. And then there's the clothes. And then you lose weight and you have to buy more clothes to work out in and it's like this never-ending cycle. And my protein shakes are 12 for \$18.95. Like expensive. They work though. I swear

by them. But like there is so much that goes into that. (Participant from Focus Group 2)

Importantly, many of the women reported a moderate household income. However, the impact of income on eating, exercise, and other lifestyle choices was a prominent theme. Therefore, interventions aimed at this group should use inclusive language and examples, accessible to anyone no matter their economic means.

Theme: Religion and spirituality

Religion and spirituality is both a broad and largely personal topic in that it can cover a variety of different beliefs and practices. Nevertheless, inquiry about the usefulness of addressing religious and spiritual beliefs was a specific question during the semi-structured focus groups. Participants discussed the impact of religious and spiritual beliefs on both eating habits and thoughts about BE behaviors. In the selection below, one woman describes the relationship between religious beliefs and her eating patterns.

Religion and spirituality plays with food too. Whether you pray over meals, whether you're eating at holidays. All of that. And I think that is a big part of our culture. Even people who are not very religious, like myself, I'm going to be like "thank you God for this food. It's delicious." You know, so I think there is a tie there. I'm also Catholic, so there is a guilt tie. We are like trained from a very young age to just have guilt about stuff. A lot of my guilt in binge eating, that can be a religion tie-in because gluttony and overindulgence is a sin and then you eat and this stuff and you're like "I'm going to hell. I'm going to hell." You know what I mean? And that drives into you at a very young age so that when you find yourself binging your like "God hates me. This is horrible." You know? So there could be a tie in that and you're right, I think that is a big part of who we are as African Americans. Whatever denomination and whatever degree you're in, but just religion and spirituality and how that relates. And I don't want to deprogram anybody and be like they are two separate things. Acknowledging that there is a tie and that you need to, as you acknowledge why you're eating, acknowledge that there is a tie with that. (Participant from Focus Group 2)

Participants of the focus groups also indicated how religious and spiritual beliefs

can be framed as a support while trying to make difficult changes. Whether referencing

specific scriptures to help build determination, or calling on a higher power or spiritual

leaders for guidance and a source of strength, religion and spirituality may be an

important resource among AA women with BE.

I think your overall faith, I think on the surface it may play a part, but deep inside it doesn't matter what your faith is. What you're going through is what you're going through. So, I don't know if that, you know, would make a big difference. It may. If you gain some insight on how to deal with it because of your faith. (Participant from Focus Group 1)

And I think when it's self-help, I don't know if people are actually able to do that themselves. So maybe hinting more at, you know, at least talking to someone. Either professional or close friend or clergy or something like that. This just came to mind as I was talking. I don't know if it needs to be here...not everyone in the African American community is spiritual or religious but I wonder if it is worth mentioning. (Participant from Focus Group 2)

Joshua 1, verse 1-9 [references be strong and of good courage several times]. (Participant from Focus Group 7)

You do these steps, these are practical things, but at the end of the day you can't do anything or your own. Like it takes strength from the Lord. For me, I need that in there. You know, at the end of the day if I fail, I know that my strength comes from somewhere else, so I think that would really get attention. (Participant from Focus Group 7)

Religious and spiritual beliefs are personal and highly varied. However,

participants acknowledged how these beliefs may be used as motivation to deter against

disordered eating. Discussing every possible religious viewpoint as it relates to eating is

beyond the scope of the manual. Nonetheless, it may be helpful to have women

purposefully reflect on their own beliefs, if these beliefs influence eating, and how those

beliefs could be used as a support in the process of overcoming BE.

Theme: Psychological states and BE

One of the key points of the self-help CBT is developing an understanding of an

individual's triggers for BE. Fairburn (1995) discusses how emotional states such as

feeling overwhelmed and stressed, as well as clinically significant mood symptoms such as anxiety and depression, may be a trigger for BE. Participants of the study seemed to identify with this idea. Women related their own experiences of BE when stressed, as a response to trauma, and as a way to bring comfort when experiencing negative moods.

I think when he got to the part when he started connecting whether the person had depression, whether they were depressed, whether they were suffering from any other kind of anxieties that may bring upon the binge eating, I thought that was really good. (Participant from Focus Group 1)

I think the key point, and I don't know if it would be attractive, because sometimes people don't want to do what I call the work, but really figuring out the trigger and what it is. Okay you're stressed. Okay you didn't feel well. But what is it? And so when I talked with other people for example I have a friend and her mother is extremely overweight, but her mother chose to be that way because she had, she was sexually assaulted as a child and so she feels if she is overweight no one will want to you know, like I guess sexually assault her anymore. It diverts attention. And you would never think that. You just think, you just look at her and say "oh you know, whatever." But, that's all the way from childhood. And everyone's story isn't like that but maybe helping [to bring awareness]. Obviously the issue is sexual assault and you know the weight and eating kind of covers it up. But I kind of think the root causes should be more of the focus, but I know sometimes people don't want to remember or deal with traumas. So I don't know if that's the best answer but I think it's the one that makes sense. (Participant from Focus Group 2)

I got molested when I was young. And like I said, I'm the heaviest in my family. And they say "Mama why are we the only ones that's swollen in the family", I said "Y'all take after your mama." But I think, like I told them, I think I kept this weight on me all these years like this just to keep the men away. I've been single by myself for like 15 years. People be like, "pretty like you, you don't have a man?" And I'm like, I don't want none. It's different reasons why people binge eat, and that was one of my own personal experiences. (Participant from Focus Group 8)

I feel like I'm a stress and emotional eater as well, and I find myself, I say like my addiction is fast food and I'll eat it. I know that I don't need it and I can go home food is in the freezer and everything but I will get fast food all the time. I know when I'm stressing really, really bad, it is awful. I could it eat breakfast lunch and dinner and I know like I have certain health issues that I take medicine for that eating all that fast food is not helping at all. But in my mind I'm like "well you're taking the medicine so it's going to offset all the negative that the fast food is doing". So chapter four really helps because it, when I read through it I

recognized a lot of the patterns that I have, and a lot of the things that I do. I have had counseling for it, but I, when they're talking to me in my mind I'm thinking "okay she doesn't know me", so you cant really tell me what's going on with my eating or with my issue or whatever. (Participant from Focus Group 3)

When my granny died I just ate and slept. I didn't want to do nothing. I painted my house black and I just wanted to stay home. I didn't want to do nothing. Then I started shielding my kids, making them stay home. They say "What's wrong with you, why you making us stay home?" Because I didn't want them to leave. So we ate. I think we ate fast food for about 4 years. Fast food for breakfast, lunch, and dinner. (Participant from Focus Group 8)

I like this chapter more than the other ones, because as far as the monitoring stuff, you have different stressors throughout the day, and to be honest, [binge eating] occurs more at the same time if you look at your pattern. That way you are able to see [the] stressors. Speaking from my point of view, that's when I tend to like, ok I'm getting ready to get something to eat, because I'm a stress eater. So at those times, you can really look and see and say this is the times. What else can I do here? So I was looking at this and was like, you know, this was really helpful. Because it sort of put it into perspective and was like ok, at this time, this is what's happening at these times and you can really see some of the patterns, just reading the book. You know, so it was really helpful, so I liked this part of it a lot. (Participant from Focus Group 7)

I know I've said this like twelve times, but I just feel like this would really help if it just had a section strictly talking about self awareness and like worrying about yourself because its like great. These are some great tips, great steps, but its like if you're not dealing with the root cause of the situation then it ... doesn't matter what you do. It'll last for a while and it'll come back up, so definitely adding like a section of kind of going through your emotions and dealing with why you binge eat. (Participant from Focus Group 4)

The representative statements above emphasize women's appreciation for

acknowledging the emotional triggers for why someone may engage in BE. This is

consistent with previous findings showing the high comorbidity between mood symptoms

and BE, particularly in AA women (Pike et al., 2001). Therefore, this is an aspect of the

manual that appears to be more culturally relevant, and may benefit from additional

emphasis.

Theme: Positive feedback about self-help CBT

Easy to Understand

The manual is written as a self-help book, easily accessible to lay audiences.

Although the manual can be used in the earlier described CBTgsh, or guided form, it is

designed to help someone quickly understand the steps needed to change BE. Participants

in the focus group verified the manual's accessibility and repeatedly stated the material

was very easy to understand.

It was very, very basic. Very elementary, very simplistic too. So, it was easy to understand. (Participant from Focus Group 1)

The book was really easy to read, and I didn't think it was going to be easy to read, because it looks like a self-help book. (Participant from Focus Group 5)

It was easy to read. When I first saw the cover and I imagined, when it said clinical research, I was like this was going to be a doctor's perspective and using words I don't understand, and clinical things. But [the findings were] watered down a lot to where you could understand. (Participant from Focus Group 6)

It's not a lot to read, it's not a lot to go over. It's a pretty quick read for those who, you know, are readers. And especially for those who work during the week or something like that. Something you can just read and keep in their mind. So I think if they read it, it would be helpful for them. (Participant from Focus Group 7)

One participant highlighted that the cover of the book may be a little daunting.

However, participants described being pleased that the manual was both a quick and easy

read. This aspect of the manual is a definite strength, and any changes should be sure to

maintain the accessibility of the material for lay audiences.

Manual as a reference

Related to the manual being easy to understand, is the idea that the book can be

used as a long-term reference. Step 6 of self-help CBT "What Next", discusses the

benefits of regular review of the material to maintain improvements and increase

likelihood for sustained success in reducing BE (Fairburn, 1995). Participants of the

study also emphasized the benefit of the manual for future reference.

I am glad I have the book because I will refer back to it. (Participant from Focus Group 1)

To hold on to [book] is going to be a positive for me because I will pick it up and I'll say "I remember reading that let me try this", you know. (Participant from Focus Group 3)

I feel like I just read it and going back over it is a good now to remember what you just learned and take it on with you. (Participant from Focus Group 5)

I think it would work because you have, like, steps in front of you and it gives you like really good advice and you always have something that you can refer back to. (Participant from Focus Group 7)

Self-help CBT is divided into two distinct sections. The first half provides general

information on disordered eating and the second provides steps for change. Participants

valued self-help CBT as a step-by-step guide to reducing BE and a reference for future

BE questions and concerns.

Theme: Negative feedback about the self-help CBT

Repetitiveness

Data described above underscore participants' perceived benefit of self-help CBT.

However, there were also several areas where changes or additions are likely needed.

One such area is the repetitiveness of the manual. Although repeating information can

facilitate learning, the current form of the manual allows for easy reference to earlier

sections and previously discussed information. Therefore, the repetitiveness is likely

unnecessary as readers can easily view previous sections.

I mean, to actually get into the step in depth, I think there was certain points he was trying to definitely drive home and if you didn't get it and you really needed to get it, you would have it by the end of the book. But I think he could have said the same thing in fewer words (everyone agrees). Because it got to the point

where I would find myself kind of scanning a section because it was like okay, I just read that in the previous section (everyone agrees). But you know if I had to say study this to be a part of a say a class or something I would definitely have it by the time I finished the book. But reading it for something like this I think it could have been condensed just a little bit. (Participant from Focus Group 1)

The repetitive[ness] came towards the end as it was building. So instead of saying this is your next step, it would go over step 1 and then introduce step 2, and when it came to step 3 it would go over step 1 and 2 and introduce step 3, so it was almost like you were reading [it over and over]. I can see where that could be beneficial, you know, if you are dealing with this to be able to remember. If you are trying to take the steps, it would be good from a point of trying to remember and keeping it all in your head. But from a point of reading as a family member, or someone who is reaching out to someone who binge eats, it might be kind of, let me skip that part, or skip through it because I've already been informed, and move on to the next. (Participant from Focus Group 7)

Memorization is facilitated through repetition. However, memorizing the manual

is not indicated in order to successfully manage BE. Therefore, reducing some of the

repetition and review may be beneficial in improving the manual and improving the

utility for AA women with BE.

Use of Technology for Monitoring

Self-help CBT presents monitoring as a critical first step in changing BE

behavior. Although there was mixed feedback on the helpfulness and difficulty of

monitoring, participants across groups highlighted the use of technology in assisting with

this task. Unfortunately, self-help CBT does not reference the use of technology or food-

monitoring applications in reducing BE.

There are so many programs out there now online that you can just go in there and input that data and they already have it pre-programmed because so many people are using it. You can just go in there and pop up what you have. (Participant from Focus Group 1)

For this step, I can't kind of stay up with journal-type things. So instead I tried to do it with Livestrong -- like a diet app for the self-monitoring part. I don't know if you've seen it. It's like Your Healthy Plate. You keep track of all your food on

Livestrong and it's an app you can have on a smartphone. (Participant from Focus Group 5)

Apps are easier, especially with phone apps because you can log it in. Because when you're eating, sometimes you're not around pencil and paper and by the time you get home, if you're a snacker between, you're not going to write everything down. Whereas you have your phone, everyone has their phone with them. It's easier just to record everything in the phone. (Participant from Focus Group 7)

While participants discussed the helpfulness of applications, they also noted

important areas of improvement for applications in assisting with monitoring specifically

for BE. For example, a key feature of monitoring in self-help CBT is noting the

emotional context of ones eating. However, many readily available food-monitoring

applications lack this important element. Furthermore, these applications are designed

specifically for monitoring calories and other macronutrients and may have a level of

detail that seems cumbersome for women engaged in CBTgsh.

I think if it was simple [it would be more helpful]. Like so simple as like I eat 6 cookies and they ask me about my feelings and instead of journaling they had like smiley faces and ask how do you feel? I'd be like "I feel kind of sad." You know what I mean like if I could like click a button and a sad face comes up like an emoji then I'll be good. If I have to like type it out and be like "oh I'm kind of stressed out." Like I don't want to do that. If you are going to make it that accessible I need to be like "6 cookies and I'm feeling crazy." You know? And then keep moving. (Participant from Focus Group 2)

I agree because even with My Fitness Pal I think I might have used it for a couple of months but then it's so overwhelming because it's like "what kind of cookies?" You know like "what are the grams?" I'm just like I don't know, I'll just figure it out. So those are too much information and are overwhelming. (Participant from Focus Group 2)

Food-monitoring applications were well known among participants. Although

used by many, participants made suggestions for important additions to these applications

to better compliment self-help CBT. Despite their limitations, food-monitoring

applications may be a helpful tool in the process of treating BE and warrant consideration in the process of adapting this intervention for use with AA women.

Alternative Activities to BE

Step 3 of self-help CBT is "Alternatives to Binge Eating" and discusses the

importance of developing a list of activities that one can engage in as an alternative to

binge eating. Examples of these activities include: exercising, spending time with

children or family, calling a friend, playing music or taking a shower or bath (Fairburn,

1995). Although Fairburn (1995) highlights the importance of creating a personalized list

of alternative activities, focus group participants described their overall dissatisfaction

with alternative activities suggested in the book. Participants felt that the listed activities

were not effective, unrealistic for frequent use, or would not be as successful in stopping

BE as they had nothing to do with eating.

Like playing music, I don't think I would do that for me at least. I'll play music and I'll be like "Yeah I'm still hungry, I could still go for those Oreo's I had in the kitchen" and I'll go get those. I'm like walk[ing] with headphones in and I'll go grab the Oreo's and I'll eat the whole pack with the music playing. That wouldn't do anything. (Participant from Focus Group #4)

For me [the activities] wasn't [helpful], 'cause it requires a shift in my schedule and way of doing things. And it's dependent on something outside of, well some of it's not, but most of it's dependent on something outside of me. As an introvert, I enjoy spending time at home, so I don't want to, if I binge often I wouldn't want to do these things quite often. Like I could maybe do these things once a week, if I binge you know, one time the swimming might help, but I'm not going to want to swim every single time I binge. (Participant from Focus Group #5)

I feel like none of these are like the chewing gum method. Like when I want to eat, I'm going to eat. So it doesn't help me to do something completely -- like a different activity to get my mind off of it. Because sometimes when I binge eat, I'm really hungry underneath it. I just keep going. So maybe like -- I don't know. I didn't like the alternative activities step. Just because I'm -- I don't have a lot of access, first of all, to -- I don't know. It's just unlikely for me to do any of these things. (Participant from Focus Group #6) Participants expressed interest in changes to self-help CBT that would provide a

more appropriate list of alternative activities. Although Step 3 caused some concern for

the participants, the issues were with the examples listed rather than the concept of

creating alternative activities for BE.

Importance of lifestyle change

The focus of self-help CBT is changing from overeating and BE to normal eating

behavior. One of the efforts to change maladaptive eating patterns is to establish a regular

pattern of eating, including consistent meals and snacks. Yet many women expressed

wanting additional guidance about distinguishing between a meal and snack, as well as

information about healthy food choices.

It tells you what you should eat, but it doesn't give you options. (Participant from Focus Group 1)

I think anything for me is a snack. And it's like you got to change your mind. A bag of Doritos is a snack but an apple is too, you know?" (Participant from Focus Group 2)

I kept looking at the juice...I thought the breakfast was good, lunch [was good], one of the snacks-when it said apple juice, to me that's not a snack it's a drink. (Participant from Focus Group 6)

Addressing the specific types of foods one could eat for meals and snacks requires

considering AA women's common eating habits and food choices. For example,

suggesting foods that are not common within a cultural group influences women's beliefs

that the manual is not appropriate for their experiences. However, considering common

food choices and making appropriate recommendations for substitutions may make

women feel more included and comfortable following the program.

I think they could address some cultural differences that black women may have with other races. Like for me, I grew up in the South, so there's a lot of different types of foods that I would eat that a black lady from the North wouldn't

necessarily eat. More fried foods and greasier foods, and beans, and lots of pork and everything. So if they could find a way to just maybe, not a whole chapter devoted to it, but just mention that they understand there's come cultural differences that may affect how we eat and why in certain instances we feel like we have to eat a lot of portions. (Participant from Focus Group 4)

In addition to food choices, participants also discussed physical activity as part of

a healthy lifestyle. While the manual does not focus on weight loss, many women

discussed exercise, barriers to exercise and how this may influence eating choices and

energy needs.

Something he neglected to mention, well he may have touched upon it a little bit, but if you are very sedentary, I don't care how much you cut back on your eating, you're still going to gain weight. You have to move. (Participant from Focus Group 1)

The hair thing is huge because I... my mom showed a picture of me on like Instagram and was like "when are you going to get your hair done?" And I was like "I can either have pretty hair or I can lose weight. Which one do you want?" Because it's not going to look beautiful like I went to the salon this morning. It's not going to look beautiful as soon as I go to the gym. And I had to get to a place where I was okay with that. Where [my hair] is going to be fuzzy but I'm going to work out every day. I can't do both. You can't have both. I know plenty of women who don't work out because they are afraid to sweat and I'm like that's tragic. (Participant from Focus Group 2)

Your activity level, if you're running around and you're doing a crap ton of stuff all day, you would definitely need more energy and you would definitely eat more. But if you're not doing as much, if you don't have an as active lifestyle, you wouldn't need as much energy throughout the day. (Participant from Focus Group 4)

Food choices, physical activity, and weight loss are not key components of the

CBTgsh intervention. However, based on participant responses, these topics are natural

compliments to a discussion about overeating. Including additional guidance on these

topics may provide a more holistic approach to changing BE and encouraging overall

healthy lifestyle change.

Skepticism about BMI

BMI, or body mass index, is a well-accepted means of estimating excess weight.

Some women appreciated that the author of self-help CBT discussed BMI and provided a

way to manually calculate one's BMI. However, other participants noted that the BMI

scale seems inaccurate with AA women's body shapes.

I like his weight charts in here because they are very-, from what the weight chart might have been from years ago, they have adjusted it so much. I'm like "okay this is not too bad" (everyone agrees). And you know it's so sad. Like he says, being overweight is genetic. (Participant from Focus Group 1)

[The book says] "Oh if you think you're overweight go to 208." I'm like okay, so I like raced there. I was like "Okay let's see what that says." I am a long-standing proponent that the BMI is not written for black people, ...and I don't care and if that's my excuse then fine, so be it. And so I looked at it and I'm like well according to this I'm overweight, but I also workout 7 days a week and, you know, I watch my calories or whatever, and I have a lot of muscle mass and none of that is taken in. And then genetics. So if I were to write a book for black people, don't put BMI in it. That is just my opinion. I just don't buy into it that it's a good...or it just needs to be redone. It needs to be like the black BMI, the BBMI because I just don't buy into that because it just doesn't even make sense. I don't know what I would look like at 172 pounds. I've lost 60 pounds in the last year, like people already think I have cancer so like I cannot imagine what it would look like at 172 and that doesn't even make sense for my height and my body type and how active I am. And I always hate that. And that would turn me off to the book. (Participant from Focus Group 2)

My sister wanted to meet with [a trainer] to start training and stuff and he was like the BMI, don't ever go by those online or on the NIH, I think that's the National Institute of Health. "Don't ever go by those or anything". He's like " 'cause black people, our BMI or whatever is different than people of other races and stuff. Like every race is kind of different." So if you go by that then it's kind of like you're considered obese and you're like "I'm obese" and it'll make you feel bad about yourself. You look at yourself, you're fine, you look great. But if you're like "oh I want my BMI to be 20 and it's at like a 32 right now", it's like are you sure? Because you look fine right now. (Participant from Focus Group 4)

Reviews on the benefits of including the BMI scale are somewhat mixed. Some

participants valued the information, whereas others found the BMI scale unhelpful.

Nonetheless, discussing the rationale behind the BMI and evidence for any variation

among groups may increase buy-in among this group.

Representativeness of the Treatment

Data presented earlier in this chapter highlights the unique experience of BE

among AA women. BE in AA women may look different than BE in other groups.

Therefore, a generic treatment is not likely to be representative of AA women's

experiences. Participants in the study discussed the importance of "fit" and feeling like

self-help CBT did not reflect their needs and experiences of BE.

It has to fit the person. (Participant from Focus Group 1)

I was kind of looking for me in [the book] and I didn't see that. And like most psychological books and psychology books, it's written from one gender, one race perspective so I'm like "when do we get to the black people?" and that just never really happened. So it's hard to put myself in some neutral space to be like "okay that could totally be like, be me". That was hard to get in that space and I hate to say that we are different, but we are. We are and [we are] when we see dieting and body image. So while I understand like who are the bingers, I'm like "yes but talk about how black people are binging because I do it on Christmas." You know what I mean? Like and talking from that...I was looking for that language and that [was] just never [there]. The fact that it was absent was kind of not helpful. (Participant from Focus Group 1)

But if you really want something that is going to work for you I think you almost have to seek professional help in order to get something that is going to be tailored to you and that actually works and you can live with. (Participant from Focus Group 2)

I felt like it was for a White woman, not for a black woman at all...I know on page 46 where it talks about figure 7 and like the list of foods not to eat, I think the first one that got me [was] quiche and tarts and all. It just, it didn't scream like black girl. I probably would have said like apple pie. (Participant from Focus Group 4)

Maybe if there was like, I don't know, if there was like a picture of, you know, a figure drawing of just body types. Maybe doesn't have to say anything, but just like different body types so that curvy women would realize that maybe they have the problem even if they want to get a certain body type or want to add [fat] only to one part of their body. They're still having binge eating-like mentalities. It doesn't only apply to you if you want to be thin, because a lot of girls want to be thick and curvy but they're doing harmful things sometimes. (Participant from Focus Group 5)

What works for me is not going to work for you. (Participant from Focus Group 7)

Do I think it's relevant for everybody, no not at all. Even in my circles, I'm the odd one in that I like to write things down, I keep track of stuff, and I'm organized. I don't know that, you know, the majority of African American women if they're reading this, will want to take the time to get out paper, keep up with the paper, write down all this stuff, and you know, a lot of people are busy. African American women, you know, have children they're tending to, working jobs and school, so I don't know that they would necessarily have time to do all those steps. (Participants from Focus Group 7)

Although the manual was not written for a particular racial or ethnic group, results from the focus group shows that participants felt their experiences were largely ignored and that self-help CBT may be targeted to White women. This point is especially important given women's unique experiences and participants' statements on the

importance of feeling represented by the information presented in the manual.

Motivation for change

In addition to adjustments to represent AA women, another potential area of

improvement for self-help CBT is addressing motivation for change. One topic, as suggested by participants, is the health implications of BE and how that may impact future goals. Participants discussed how knowing the health implications of certain BE related behaviors, such as the physical effects of frequent vomiting as discussed in the book, may deter women from engaging in BE. Other considerations include the influence of weight on life events, such as pregnancy.

Until you make that shift. When I really started losing weight I was like I want to have kids one day. And I don't want the doctor to be like because of your weight or because of this or because of that you can't have them. I have friends who are struggling. It sucks. I just want to put myself in the best possible position to do what I want to do. Whether that's travel, have children, or whatever. For me that works. But you're right it's a shifting in priorities. My parents were both doctors. I know about diseases. I was like I don't care, this food is delicious. (Participant from Focus Group #2)

Nonetheless, simply having information about the potential health effects of BE is not enough to spark motivation for change. Women in the focus groups discussed the idea of being ready to engage in the process to make change. In other words, providing treatment is only one of many barriers to influence BE.

In the end he didn't really talk about that you have to be ready to change. You know what I mean? And that's a big part of it. And the why? I've known why for like years but I have to get to a point in my life where I'm like "I'm ready." And some people aren't there. And you know, I have friends who struggle with weight and they're like "you're losing all this weight and I want to be like you." I'm like "You're not ready to be there and it's okay." And when you are good and ready, and hopefully it's not too late, but you'll do it too. (Participant from Focus Group 2)

You can say you're going to do it for your kids, you're going to do it for like being thin at [the] family reunion or whatever. But [until] it clicks in your mind that you need to start taking better care of yourself, then that's not going to work, and in my I've not had that click yet. (Participant from Focus Group 3)

I think [the book] could [work] if I gave it a hundred percent. (Participant from Focus Group 7)

I think it will, as long as you put you're mind to it and it's something you are willing to do, then you would do it. (Participant from Focus Group 8)

Participants gave rich information about their experiences of BE and what was

both helpful and unhelpful about the manual. Yet perhaps the most practical factor of

whether an intervention will be successful is one's personal motivation and engagement.

Fairburn (1995) poses the question "Why Change?" and encourages readers to list the

advantages and disadvantages of changing BE. However, feedback from participants

indicates much more attention is needed to this important component of treatment for BE.

In sum, data from of the focus groups provide a deeper understanding of how AA women with BE think about eating, how these eating patterns are shaped and developed, the multiple meanings of food, and ways to better target BE within this group. Overall,

participants found the manual useful. Nonetheless, they highlighted key areas where selfhelp CBT could be improved. The next chapter will highlight recommended changes for CBTgsh for use in AA women with BE.

	Total Sample (n=16)	North Carolina Sample (n=11)	Tennessee Sample (n=5)
Age			
Mean (years) SD	38.06 12.49	35.55 14.00	43.6 6.23
Body Mass Index			
Mean	36.14	31.83	45.63
SD	12.68	4.72	19.57
Highest Level of Education			
Some College or 2-year Degree	43.8%	36.4%	60.0%
Four Year College Graduate	31.2%	27.2%	40.0%
More than 4-year College Degree	25.0%	36.4%	0.0%
Marital Status			
Single or Never Been Married	56.3%	45.5%	80.0%
Married or Living as Married	37.5%	45.5%	20.0%
Separated or Divorced	6.2%	9.0%	0.0%
Children			
Has at least 1 child	56.3%	45.5%	80.0%
Number Living in Household			
Mean	2.19	2.18	2.20
SD	1.33	0.87	2.17
Employment			
Currently Employed	75.00%	81.8%	60.0%
Yearly Household Income			
Less than \$25,000	33.3%	18.2%	75.0%
\$25,000-\$49,999	33.3%	36.4%	25.0%
\$50,000-\$99,999	26.7%	36.4%	0.0%
\$100,000 or more	6.7%	9.0%	0.0%
Insurance Coverage			
Insured Any Point in Past 5 Years (%)	87.5%	100%	60%
Months Covered (Mean)	48.00	48.00	48.00
SD	19.03	21.23	12.00

Table 1: Participant demographics

	Total Sample (n=16)	North Carolina Sample (n=11)	Tennessee Sample (n=5)
Eating Problems	· · ·		
Ever Had Problem-Currently	31.1%	36.5%	20.0%
Ever Had Problem-Past	43.8%	36.5%	60.0%
Ever Wanted Help-Currently	37.5%	27.3%	60.0%
Ever Wanted Help-Past	37.5%	54.5%	0.0%
Ever Received Treatment	6.3%	9.1%	0.0%
OBEs in Past 28 Days			
Mean	5.27	6.00	3.25
SD	5.01	5.12	4.71
Days OBEs Occurred in Past 28 Days			
Mean	4.27	4.70	3.40
SD	5.42	5.10	6.54
50	5.42	5.10	0.54
Vomiting in Past 28 Days			
Mean	0.00	0.00	0.00
SD	0.00	0.00	0.00
Laxative Use in Past 28 Days			
Mean	4.00	3.73	4.60
SD	7.52	7.13	9.21
Compelled to Exercise in Past 28 Days			
Mean	5.27	7.60	0.60
SD	7.34	8.09	0.89
EDEO Destador Calendar Carego			
EDEQ Restraint Subscale Score	2 (1	2 54	276
Mean	2.61	2.54	2.76
SD	1.41	1.67	0.80
EDEQ Eating Concerns Subscale Score			
Mean	1.81	1.96	1.48
SD	1.33	1.32	1.43
EDEQ Shape Concerns Subscale Score			
Mean	4.25	4.38	4.03
SD	1.32	1.36	1.38

Table 2: Participant eating characteristics

EDEQ Weight Concerns Subscale Score

3.96
0.80
3.06
0.30

General Thoughts about BE	Positive Feedback about the Manual	Negative Feedback about the Manual
Limited awareness of BE behavior	Easy to understand	Very repetitive
Presence of culture specific views of shape and weight	Great reference for future use	Needs to address the use of technology
Large influence of family on eating practices		Needs additional alternative activities for BE
Various meanings for food		Needs to address importance of overall healthy lifestyle change
Influence of income on eating practices		Overall skepticism about use of BMI
Relationship between religion and spirituality and eating habits		Felt manual was not representative of participant experiences
Relationship between psychological states and BE		Needs to further address motivation for change

Table 3: Themes from the focus groups

CHAPTER 5: RECOMMENDED CHANGES AND DISCUSSION

The presented findings support the initial hypothesis that focus group participants would suggest the need for changes to self-help CBT and CBTgsh. Data highlight the unique experiences of AA women with BE and described both positively and negatively viewed aspects of the intervention. The second hypothesis of this study states feedback provided by participants of the focus group would be of sufficient detail to suggest meaningful adaptations to CBTgsh. The richness of participant comments, as sampled above, certainly show potential adaptations to make the intervention culturally tailored for AA women with BE. Fortunately, CBTgsh, a guided intervention using self-help CBT, provides a format for supplemental information to be added and areas of the book to be highlighted. A discussion of specific changes that may be useful for the intervention is discussed below.

Suggested Cultural Adaptations for the Self-Help CBT

One of the most striking themes that emerged from the data concerns the relative lack of awareness of BE within the AA community. Participants discussed the dearth of information about BE in AA women and did not identify their own eating patterns as potentially disordered. Although the research on BE in racial and ethnic minority groups still has significant areas of growth, findings described in the literature review show that BE does occur among AA women and begins to paint a picture of how BE is experienced within this group (Cachelin et al., 2000; Gluck, 2006; Grilo et al., 2013; Groesz et al., 2012; Harrington et al., 2010; Pike et al., 2001; Striegel-Moore et al., 2002; Striegel-Moore et al., 2003; Sulkowski et al., 2011). Therefore, an important addition to this intervention is providing psychoeducation on BE among AA women. This addition would meet several needs. First, it will increase awareness about BE in AA women, as little is known even among members of this group. Second it will help AA women to feel represented within the manual and that the intervention recognizes their individual needs.

Related to the importance of providing psychoeducation on the prevalence and unique characteristics of BE among AA women, is acknowledging the distinctive cultural views of shape and weight. Previous research denotes the acceptance of a larger body and potential preference for a larger frame (Beauboeuf-Lafontant, 2003; Perez & Joiner, 2003). Data from the current study are consistent with previous findings and adds richness to the complex views of the shape and weight among AA women. An in-depth description of all possible views is likely unnecessary for the scope of the intervention. Nonetheless, specific text communicating the variability of shape and weight preferences among AA women will likely make AA women with BE feel understood and that the intervention is applicable despite their diverse views.

AA women in the study described the influence of family and loved ones on how food is both prepared and eaten. Women also expressed how family members may not support changes with BE, as this may be seen as a rejection of values and traditions (James, 2004). Fairburn (1995) states:

When eating with others, do not be persuaded to eat more than you planned. Many people are put under pressure to have second helpings or larger quantities than they want. You must resist this pressure. Practice polite but firm ways of refusing-e.g., "No, thank you. I have really had enough. It was delicious." If someone still puts unwanted food on your plate, leave it untouched. Under these circumstances it is really that person who is being impolite, not you. (pg. 164). Yet, this paragraph seems much too simplistic for the entrenched influence of family on BE in AA women. Therefore, additional text is warranted to acknowledge this influence and prepare women for the difficulties that tackling BE may cause within important relationships.

Recognition is also needed addressing the meaning of food. Data show the women viewed food as a valuable commodity, a sign of appreciation and love, and an example of sacrifice when food supplies are strained. Hence the practice of eating with loved ones and accepting food offered is akin to sharing an appreciated gift. Airhihenbuwa and colleagues (1996) discuss how eating can be seen as a spiritual experience to be shared with special loved ones. Consequently, language should be added to the intervention recognizing the meaning of food among AA women with BE, and describing how establishing a regular pattern of eating can still align with an expanded understanding of the importance of food.

Related to the recognition of the meaning of food, particularly among those with limited resources, is an acknowledgment of the influence of income on eating choices and other healthy lifestyle change. Participants in the current study described difficulties with limiting access to specific foods on a budget (e.g. if a larger quantity is more economical) and the perceived expense of purchasing healthier foods and adopting healthier lifestyle choices. An important addition to the intervention would be use of inclusive language and examples. As an illustration, a section could be added to discuss how to limit access to foods bought in bulk during a sale, such as keeping excess food at a loved one's home until it is needed. These additions will make the manual more appropriate for AA women regardless of their economic status. Discussion of the influence of religion and spirituality could also be an important adaptation to the CBTgsh intervention; whether a trigger for feelings of guilt or a source of inspiration and strength when making difficult changes, religion and spirituality has a significant impact on women who hold these beliefs. Furthermore, even AA women with similar beliefs may have unique perceptions of how these religious and spiritual views may influence BE. Therefore, it would be beneficial to prompt women to think about their personal beliefs and how one's religion and spirituality may interact with treatment.

The adaptations discussed above represent generic themes about BE in AA women that may be useful to acknowledge in treatment. However, participants also discussed specific likes and dislikes about the manual and underscored some important changes. One important edit of the original intervention is addressing repetitiveness. Participants identified the potential value of repeating information, particularly when trying to memorize information. Nonetheless, women described that much of the repetition was unnecessary as readers could easily reference earlier material. Culturally adapting the intervention for this group would entail removing repetitive language. However, this may be a beneficial deletion as removing repeated information would allow for important content as described above to be added without excessively lengthening the intervention materials.

Participants were also dissatisfied with the manual's list of alternative activities for BE. Participants perceived the listed activities were ineffective, as they were unrelated to eating. Participants also described how the examples seemed unrealistic for frequent use. While self-help CBT acknowledges the importance of creating a personalized list of alternative activities, this message may have been lost while reading the book. This is one theme from the data where additional research is highly important. It will be beneficial for future qualitative research to explore the types of alternative activities most effective for AA women who have successfully reduced BE.

Self-help CBT largely focuses on changing BE and provides comparatively limited resources for adopting healthy lifestyle change. Nonetheless participants in the study described a need for additional guidance on healthy food choices and an acknowledgement of culturally influenced food preferences. National estimates show that only 8%-21% of AAs meet dietary guidelines for fruit and vegetable consumption (CDC, 2009; Gary et al., 2004). Therefore, adaptations would include changing some of the examples of food choices to more culturally recognizable items (e.g. scrambled eggs substituted for quiche) and including recommendations for healthy eating practices. Furthermore participants expressed interest in addressing barriers to physical activity. More than 45% of AA women are inactive with no leisurely physical activity (CDC, 2010). Hence discussing ways to overcome obstacles to engaging in exercise, will likely be beneficial in improving overall healthy lifestyle change.

Women also expressed broad skepticism about BMI and if it is representative of AA women's health and body composition. Research suggests there may be variations in the relationship between body fat percent and BMI, as well as the relationship between BMI and health status among AAs as compared to White Americans (Deurenberg, Yap & van Staveren, 1998; Katzmarzyk et al., 2011). Nonetheless, a higher BMI generally indicates increased risk of poor health outcomes. Discussion of findings on the differences in BMI among racial ethnic groups will address concerns about use with AA

73

women and hopefully increase buy-in for BMI as a broad indicator of increased health risk.

An overarching theme gathered from the data is the importance of feeling the treatment is representative of one's experiences and an appropriate fit. Participants reported impressions that the manual was directed towards White women despite a lack of specific references to racial or ethnic group. Omissions as well as inclusions in self-help CBT are important signs to identify the target group. The entire process of cultural adaptation and the specific changes as discussed above are key solutions to participants' concerns.

An additional theme from the focus groups is a need to address motivation for change. Participants described the necessity of being ready and willing to engage in the process of change. As described earlier, self-help CBT can be used alone or with a supporter as in CBTgsh. The focus groups yielded mixed support for the prospect of having a supporter, so a dominant theme did not emerge. However, if a supporter is available to guide women through the process of reducing BE, techniques for building motivation, such as Motivational Interviewing may be a beneficial addition to CBTgsh. Motivational Interviewing is a communication style designed to increase the likelihood of behavior change by having a person address their own ambivalence, barriers, and facilitators for change (Miller & Rollnick, 2012). Supporters could be trained in these techniques to help participants build motivation for changing BE. Relatedly, it may be helpful to assess one's stage of change before beginning treatment. The Transtheoretical Model describes the process that occurs as an individual engages in behavior change (Prochaska & DiClemente, 1983; Prochaska, DiClemente, & Norcross, 1992). Stages include: precontemplation or not actively considering a change, contemplation or considering a specific change, preparation or preparing for behavior change, action or actively engaging in the process of change, and maintenance or maintaining progress achieved through behavior change (Prochaska & DiClemente, 1983; Prochaska et al., 1992). Presenting an individual with information or treatment that is incompatible with their current stage of change is unlikely to promote changes in behavior and may further entrench individuals in the unwanted behavior. Therefore, assessing stage of change and tailoring treatment appropriately is an important factor in the success of treatment. Again, using CBTgsh, it may be fairly easy to train supporters to listen for language indicating one's current stage of change in addressing BE and to provide appropriate responses to match their current position.

Supporters are a unique asset to CBTgsh and can be an important tool in helping to improve BE. As discussed above, supporters can help to assess barriers and facilitators to changing BE and assist in problem solving. Furthermore, supporters can help tailor the intervention to an individual's needs. Results show the importance of acknowledging the unique experiences of BE among AA women. This applies to all aspects of the intervention, including the knowledge and perspective of supporters. In addition to training supporters on the intervention, supporters must also be trained on the sociocultural context of AA women who engage in BE. Supporters frequently interact with participants of the intervention. Therefore, it is necessary for supporters to have both a high level of awareness of AA women's experiences of BE as well as a high level of comfort discussing these experiences. In addition to training, it also may be helpful to recruit supporters from the target group, AA women with BE who have successfully completed the intervention. AA supporters who have previously participated in the intervention may be able to discuss their own personal experiences and help to improve trust and buy-in. Regardless of a supporter's race and ethnicity and history of disordered eating, they must demonstrate awareness of the unique perspective of AA women with BE.

Although several adaptations self-help CBT and CBTgsh are indicated, data show there were some positive views. For example, women expressed appreciation that emotions were acknowledged as important triggers for BE. Additionally, the women highlighted that the manual is relatively easy to understand and could be used as a reference as needed. This is encouraging as it shows that AA women with BE may find some utility in the intervention, despite needed changes. Therefore, cultural adaptations may make the manual even more appealing within this group.

Potential Biases of the Author

Research attempts to be objective and efforts are made to eliminate sources of potential bias in developing and conducting studies, and in reporting results. However, research is inherently biased by the topics chosen to study and the empirical questions asked. The concept of positionality highlights how an individual's unique identities and experiences, as well as their position in relation to others based on those identities and experiences, influences how one understands and interacts with the world (Takacs, 2003). This may be especially true for qualitative work where data is read, organized and explained using a person as the analytical tool. Reflexivity, or the process of continual acknowledgement of one's self and influence on research, is one way to manage the bias that abounds (Finlay, 2002).

The author of the present research is an AA female from the Southeastern United States with doctoral level training in psychology. The author's identity as an AA woman makes topics of minority health and disparities both personally relevant and interesting. The overall research goal, to improve treatment options for underserved communities, certainly reflects this interest and identity. Also, as a member of a historically disadvantaged group, it was very important for the author to use methods that allow for participant opinions to be understood in a holistic and undiluted manner, as restrictions can be imposed by closed questions and other survey tools. Semi-structured focus groups and qualitative analysis were intentionally chosen to meet this aim.

Focus group participants and the author share a racial and ethnic identity, being AA women living in the south. Therefore, participants may have felt more comfortable sharing certain views and opinions than if the facilitator had a different stimulus value. This shared identity also means that assumptions could be made when participants communicated ideas that were culturally familiar. For example, the author can relate to stories of the meaning of food and how family influence eating practices. However, great care was taken to further explore these ideas for clarification and understanding, rather than relying on assumptions about what participants disclosed. Despite shared identities, there are also important differences. Being a researcher can be viewed as a position of power, which may have influenced the data collected. As such, the author made an effort to inform participants about the research process and the significant contributions of their thoughts and opinions on improving treatment for AA women.

The positionality of the author undoubtedly impacted how participant responses were organized and understood. Although the present study used thematic content analysis (Green & Thorogood, 2004) to identify themes from participant statements, the author's identity influenced how the themes were recognized and described. A researcher with a different positionality and cultural lens may have understood the themes differently and arranged participant statements in a distinct way. Nonetheless, the methods detail a rigorous data collection and analytic process to strengthen the trustworthiness of the results found.

Limitations and Strengths

One important limitation for the present study is the inclusion of a relatively limited sample size and small size of the focus groups. An original aim of the study was to recruit 20 AA women with BE to participate in approximately five separate groups of about 4 women each. However, only 16 women participated in a total of 8 groups, with 2 "groups" having only 1 participant. Despite this difficulty, focus groups with only 1 participant were similar in the format, procedures, and data collected as compared to the larger groups. Although numerous efforts were made to increase both the sample size and the number of participants in each group, it was difficult to reach women who met the study criteria of BE and retain women once they were scheduled for the groups. The obstacles with recruiting and retaining minority participants in research are well documented. Systematic reviews of recruitment difficulties among ethnic minorities highlight religious beliefs, issues of mistrust and stigma, underrepresentation of minorities at recruitment sites, negative attitudes towards help-seeking from outside sources, concern about the research process, a legacy of racism and discrimination, historical events such as the Tuskeegee Syphilis Study, and minority groups being a smaller proportion of the population as significant barriers for recruiting AAs (Brown,

Marshall, Bower, Woodham, & Waheed, 2014; George et al., 2014; Yancey, Ortega, & Kumanyika, 2006). These challenges were likely exacerbated by the goal of recruiting AA women who met criteria for BE, an even smaller segment of the population. Given the difficulties with recruitment for this research, several lessons were learned. Switching data collection to an individual interview versus a focus group may have reduced scheduling concerns and ultimately improved sample size. Participants of the groups referenced busy schedules and multiple demands limiting available time. This is further complicated by the need to find a common convenient time for several women. Individual interviews would allow the data collection to occur at times most convenient for each participant. An additional reflection is the influence on lack of knowledge about eating problems and how this research may be relevant. A prominent theme of lack of awareness of BE among AA women emerged during data collection. Therefore, women may not have identified their eating as disordered or concerning, limiting the amount of women who self-selected for screening. AA women who otherwise may have been eligible may not participate due to a lack of awareness or interest in BE as a problematic eating behavior. One way this may be addressed is to partner with organizations that have strong ties with the AA community and add education as a recruitment tool. Providing education to different groups and organizations prior to recruitment may increase awareness of BE and increase the likelihood that individuals will identify disordered eating behaviors and self-select for screening as a potential participant in the study. Furthermore, it may increase visibility of the researchers among the target group and help to facilitate building familiarity and rapport. This strategy is likely to improve awareness

and comfort, and may ultimately enhance participation in a group that may be more difficult to recruit.

An additional limitation is the lack of BE symptoms evidenced by results from the EDE-Q. Prior research shows the EDE-Q generally measures higher BE episodes than other, in-depth measurements (Fairburn & Beglin, 1994). This suggests that self-reported BE would likely be higher on the EDE-Q than other means. However, the opposite was seen in the present study. Each participant met criteria for BE, including a loss of control, as assessed on the pre-screen, yet findings of the EDE-Q show some participants denied experiencing BE. Therefore, one may conclude that the sample is not truly representative of AA women with BE. However, many women did not recognize their eating habits as disordered, even after reading the manual. Furthermore, participants may not have understood the questions or seen how their eating patterns fit the EDE-Q items. Results of the focus group may explain this phenomenon as participants as a whole were not aware of BE as a problematic eating pattern and their cultural understanding of disordered eating was not representative of their individual experiences. Consequently, participants may have reported fewer BE episodes to be more consistent with viewing their BE as unproblematic. This limitation underscores the importance of the present study in exploring AA women's experiences with BE.

Despite these limitations, results provide important insight in improving the CBTgsh intervention for AA women. The sample size of 16 AA women evidenced important and clear themes. Furthermore, data show saturation of themes as analysis of the last two focus groups did not identify any new content. Although this study did not

reach the sample size goals, data collected satisfied the study question and met the overall research aims.

An important strength of the present research is the inclusion of multiple geographic locations, East Tennessee and a large urban city in North Carolina. Although one may argue that both geographic regions are in the south, there are interesting differences including the proportion of the population that is AA and the characterization of being a more rural versus an urban locality. Even with these distinctions, the qualitative data did not show any differences in themes. Therefore, conclusions can be made that common experiences of being an AA woman with BE is more relevant than the unique influences of where participants lived.

Future Directions

A significant future direction is the influence of technology on the assessment and treatment of BE. Participants discussed the use of smartphone applications to monitor and review eating choices across time and to meet specific calorie goals. Additionally, monitoring is an important first step in becoming aware of BE, before starting to change eating patterns. As such, smartphone applications may be a useful tool in making treatment more accessible and consistent with current behaviors (i.e. logging food entries onto one's phone). However, recent research found currently available applications to be limited in the specific functions needed for the treatment of disordered eating (Fairburn & Rothwell, 2015). Participants also discussed important additions to make these applications more compatible with treatment aims. Therefore, additional research is needed to explore the benefit of creating applications tailored for treating disordered eating.

A second opportunity for future research is to answer specific empirical questions highlighted by the results of the study. For example, participants expressed interest in having additional information about engaging in healthy lifestyle changes. A survey of the literature and future research could explore available interventions for increasing physical activity and fruit and vegetable consumption and identify which strategies are more successful in the target population. Further, participants felt the examples of alternative activities in the manual did not seem realistic. As stated earlier, future research could identify alternative activities that are most effective in reducing BE among AA women.

The most immediate next step for the present research is creating the adapted CBTgsh intervention. While specific recommendations for adaptations are discussed above, the intervention materials need to be edited in order to incorporate the feedback received. As part of this process, it will be important for experts in the field to review the adapted intervention and verify fidelity to the initial intervention aims. The entire process of culturally adapting evidence-based treatment is a multistep, intensive approach that is beyond the scope of the current study. Additional phases include testing the preliminary adaptation and delivering the intervention to a small group of individuals from the target group, using the results of preliminary testing to further refine the intervention, and finally, conducting a full trial determining the effectiveness of the culturally adapted intervention (Barrera et al., 2013). Future research can continue this process and complete the development of a culturally adapted intervention for treating AA women with BE.

Contributions

The socioecological perspective provides a framework for the present study.

Results explore the sociocultural influences on BE behavior among AA women with BE. This research reinforces the utility of a socioecological approach by considering both the common and unique aspects of behavior within this specific cultural group. Additionally, findings aid in the creation of a culturally adapted evidence-based intervention for BE in AA women with BE, a group for which successful and appropriate treatment options are limited (Pike et al., 2001; Striegel-Moore et al., 2003). Therefore, the current research helps begin the process of meeting the needs for this underserved group.

Research findings also help to improve the dearth of knowledge on the nuances of BE in AA women. Literature reviewed above discusses the unique psychological implications of BE and the cultural influences on eating and views of shape and weight. The present study contributes to the beginnings of a cohesive discourse of understanding the experiences of AA women with BE. As this area continues to grow, treatment can be further tailored for the specific characteristics identified and barriers can be removed to support receiving effective intervention for BE.

A final contribution for the present study is creating an opportunity for AA women with BE to feel empowered about the strength of their insight and contribute to change. Participants made statements showing their appreciation for bringing awareness of BE in AA women.

I think you're moving in the right direction. I'm glad binge eating is now clinical, but for the African American community most people shy away from getting clinical help. It's there, people need it but kind of keeping it more grass roots is probably the best way to go. I'm glad you're doing this. (Participant from Focus Group 2)

That's why I appreciate this being an African American study because, you know, maybe up until now this wasn't a priority. (Participant from Focus Group 7)

Participants seemed to truly value the opportunity to participate in research and have their thoughts and views help to improve treatment for other women with similar eating difficulties. AA women with BE are the most powerful source in the process of culturally adapting evidence-based treatment. The recognition of the unique insight among AA women with BE, is perhaps the most important contribution of all.

REFERENCES

- Aardoom, J.J., Dingemans, A.E., Slof Op't Landt, M.C.T., & Van Furth, E.F. (2012). Norms and discriminative validity of the Eating Disorder Examination Questionnaire (EDE-Q). *Eating Behaviors*, 13, 305-309.
- Adamus-Leach, H.J., Wilson, P.L., O'Connor, D.P., Rhode, P.C., Mama, S.K., & Lee, R.E. (2013). Depression, stress and body fat are associated with binge eating in a community sample of African American and Hispanic women. *Eating and Weight Disorders*, 18(2), 221-227.
- Airhihenbuwa, C.O., Kumanyika, S., Agurs, T.D., Lowe, A., Saunders, D, & Morssink, C.B. (1996). Cultural aspects of African American eating patterns. *Ethnicity and Health*, 1(3), 245-260.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- American Psychiatric Association. (2012). *Guideline watch (August 2012): Practice guideline for the treatment of patients with eating disorders (3rd ed.)*. Washington, DC: Author.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., Text Revision). Washington, DC: Author.
- Attkisson, C. C., & Zwick, R. (1982). The client satisfaction questionnaire: Psychometric properties and correlations with service utilization and psychotherapy outcome. *Evaluation and Program Planning*, *5*, 233-237.
- Avena, N.M. (2007). Examining the addictive-like properties of binge eating using an animal model of sugar dependence. *Experimental and Clinical Psychopharmacology*, 15(5), 481-491.
- Barrera Jr., M., Castro, F.G., Strycker, L.A., & Toobert, D.J. (2013). Cultural adaptations of behavioral health interventions: A progress report. *Journal of Consulting and Clinical Psychology*, 81(2), 196-205.

- Baatar, D., Patel, K., & Taub, D.D. (2011). The effects of ghrelin on inflammation and the immune system. *Molecular and Cellular Endocrinology*, *340(1)*, 44-58.
- Beauboeuf-Lafontant, T. (2003). Strong and large black women?: Exploring relationships between deviant womanhood and weight. *Gender & Society*, 17(1), 111-121.
- Beck, G.C., Brinkkoetter, P., Hanusch, C., Schulte, J., van Ackern, K., van der Woude, F.J., & Yard, B.A. (2004). Clinical review: Immunomodulatory effects of dopamine in general inflammation. *Critical Care*, 8(6), 485-491.
- Becker, A. E., Franko, D.L., Speck, A., & Herzog, D.B. (2003). Ethnicity and differential access to care for eating disorder symptoms. *International Journal of Eating Disorders*, 33(2), 205-212.
- Becker, A.E., Hadley Arrindell, A., Perloe, A., Fay, K., & Striegel-Moore, R.H. (2010). A qualitative study of perceived social barriers to care for eating disorders: perspectives from ethnically diverse health care consumers. *International Journal* of Eating Disorders, 43(7), 633-647.
- Bello, N. T., & Hajnal, A. (2010). Dopamine and binge eating behaviors. *Pharmacology Biochemistry and Behavior, 97(1),* 25-33.
- Berg, K.C., Peterson, C.B., Frazier, P., & Crow, S.J. (2012). Psychometric evaluation of the Eating Disorder Examination and Eating Disorder Examination-Questionnaire: A systematic review of the literature. *International Journal of Eating Disorders*, 45(3), 428-438.
- Bernal, G., Bonilla, J., Bellido, C. (1995). Ecological validity and cultural sensitivity for outcome research: Issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal and Child Psychology*, 23(1), 67-82.
- Bernal, G., Jiménez-Chafey, M.I., & Domenech Rodríguez, M.M. (2009). Cultural adaptation of treatments: a resource for considering culture in evidence-based practice. *Professional Psychology: Research and Practice*, 40, 361-368.

- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*. 513-531.
- Brown, G., Marshall, M., Bower, P., Woodham, A., & Waheed, W. (2014). Barriers to recruiting ethnic minorities to mental health research: a systematic review. *International Journal of Methods in Psychiatric Research*, 23(1), 36-48.
- Cachelin, F.M., Shea, M., Phimphasone, P., Wilson, G., T., Thompson, D.R., & Striegel, R.H. (2014). Culturally adapted cognitive behavioral guided self-help for binge eating: A feasibility study with Mexican Americans. *Cultural Diversity and Ethnic Minority Psychology, 20(3),* 449-457.
- Cachelin, F.M., Rebeck, R., Veisel, C., & Striegel-Moore, R.H. (2000). Barriers to treatment for eating disorders among ethnically diverse women. *International Journal of Eating Disorders*, *30*, 269-278.
- Cachelin, F.M., Veisel, C., Barzegarnazari, E., & Stiegel-Moore, R.H. (2000). Disordered eating, acculturation, and treatment-seeking in a community sample of Hispanic, Asian, black, and white women. *Psychology of Women Quarterly*, *24*(*3*), 244-253.
- Castro, F.G., Barrera Jr., M., Steiker, L.K.H. (2010). Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology*, *6*, 213-239.
- Centers for Disease Control and Prevention. (2009). *Prevalence and trends data: Nationwide 2009 fruits and vegetables*. Retrieved from http://apps.nccd.cdc. gov/brfss/race.asp?cat=FV&yr=2009&qkey=4415&state=UB
- Centers for Disease Control and Prevention. (2010). Summary health statistics for US adults: National health interview survey 2009. Retrieved from http://www.cdc .gov/nchs/data/series/sr_10/sr10_249.pdf
- Centers for Disease Control and Prevention. (2011). *Obesity: Halting the epidemic by making health easier*. Retrieved from http://www.cdc.gov/chronicdisease/ resources/publications/aag/pdf/2011/obesity_aag_web_508.pdf

- Centers for Disease Control and Prevention. (2012). *Defining Overweight and Obesity*. Retrieved from http://www.cdc.gov/obesity/adult/defining.html
- Centers for Disease Control and Prevention. (2014). *Health, United States, 2013: With special feature on prescription drugs.* Retrieved from http://www.cdc.gov/nchs/data/hus/hus13.pdf 068

Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.

- Corwin, R.L., Avena, N.M., & Boggiano, M.M. (2011). Feeding and reward: Perspectives from three rat models of binge eating. *Physiology and Behavior*, 104, 87-97.
- Davis, N.L., Clance, P.R., & Gialis, A.T. (1999). Treatment approaches for obese and overweight African American women: a consideration of cultural dimensions. *Psychotherapy*, 36(1), 27-35.
- Davis, E.M., Clark, J.M., Carrese, J.A., Gary, T.L., & Cooper, L.A. (2005). Racial and socioeconomic differences in the weight-loss experiences of obese women. *American Journal of Public Health*, 95, 1539-1543.
- Debar, L.L., Striegel-Moore, R.H., Wilson, G.T., Perrin, N., Yarborough, B.J., Dickerson, J., ... & Kraemer, H.C. (2011). Guided self-help treatment for recurrent binge eating: Replication and extension. *Psychiatric Services*, 62(4), 367-373.
- Deurenberg, P., Yap, M., & van Staveren, W.A. (1998). Body mass index and percent body fat: a meta analysis among different ethnic groups. *International Journal of Obesity*, *22*, 1164-1171.

Fairburn, C.G. (1995). Overcoming Binge Eating. New York, NY: The Guilford Press.

Fairburn, C.G., & Beglin, S.J. (2008). Eating Disorder Examination Questionnaire. In Fairburn, C.G. (Ed.), *Cognitive behavior therapy and eating disorders* (pp. 308-314). New York, NY: Guilford Press.

- Fairburn, C.G., & Beglin, S.J. (1994). Assessment of eating disorders: Interview or selfreport questionnaire? International Journal of Eating Disorders, 16(4), 363-370.
- Fairburn, C. G., & Cooper, Z. (1993). The Eating Disorder Examination (12th edition). In C. G. Fairburn, & G. T. Wilson (Eds.), *Binge eating: Nature, assessment and treatment* (pp. 317-360). New York: Guilford Press.
- Fantuzzi, G., & Faggioni, R. (2000). Leptin in the regulation of immunity, inflammation, and hematopoiesis. *Journal of Leukocytic Biology*, *68(4)*, 437-446.
- Fairburn, C.G., & Rothwell, E.R. (2015). Apps and eating disorders: A systematic clinical appraisal. *International Journal of Eating Disorders*, 48(7), 1038-1046.
- Finlay, L. (2002). "Outing" the researcher: The provenance, process, and practice of reflexivity. *Qualitative Health Research*, 12(4), 531-545.
- Fleiss, J.L. (1981). *Statistical methods for rates and proportions*. (2nd ed.). New York, NY: John Wiley and Sons Inc.
- Fleury, J., & Lee, S.M. (2006). The social ecological model and physical activity in African American women. *American Journal of Community Psychology*, *37(1/2)*, 129-140.
- Gary, T.L., Baptiste-Roberts, K., Gregg, E.W., Williams, D.E., Beckles, G.L.A., Miller III, E.J., & Engelgau, M.M. (2004). Fruit, vegetable, and fat intake in a population-based sample of African Americans. *Journal of the National Medical Association*, 96(12), 1599-1605.
- Geliebter, A., Gluck, M.E., & Hashim, S.A. (2005). Plasma ghrelin concentrations are lower in binge eating disorder. *Journal of Nutrition*, 135(5), 1326-1330.
- George, S., Duran, N., & Norris, K. (2014). A systematic review of barriers and facilitators to minority research participation among African Americans, Latinos, Asian Americans, and Pacific Islanders. *American Journal of Public Health*, 104(2), e16-e31.

Gluck, M.E. (2006). Stress response and binge eating disorder. Appetite, 46(1), 26-30.

- Green, J., & Thorogood, N. (2004). Analyzing qualitative data. In D. Silverman (Ed.), *Qualitative Methods for Health Research* (173-200). London: Sage Publications.
- Grilo, C.M., Lozano, C., & Masheb, R.M. (2005). Ethnicity and sampling bias in binge eating disorder: Black women who seek treatment have different characteristics than those who do not. *International Journal of Eating Disorders*, *38*, 257-262.
- Grilo, C.M., & Masheb, R.M. (2005). A randomized controlled comparison of guided self-help cognitive behavioral therapy and behavioral weight loss for binge eating disorder. *Behavior Research and Therapy*, 43, 1509-1525.
- Grilo, C.M., Masheb, R.M., White, M.A., Gueorguieva, R., Barnes, R.D., Walsh, B., ... Garcia, R. (2014). Treatment of binge eating disorder in racially and ethnically diverse obese patients in primary care: Randomized placebo-controlled clinical trial of self-help and medication. *Behavior Research and Therapy*, 58, 1-9.
- Grilo, C.M., White, M.A., Barnes, R.D., & Masheb, R.M. (2012). Posttraumatic stress disorder in women with binge eating disorder in primary care. *Journal of Psychiatric Practice*, *18(6)*, 408-412.
- Grilo, C.M., White, M.A., Barnes, R.D., & Masheb, R.M. (2013). Psychiatric disorder co-morbidity and correlates in an ethnically diverse sample of obese patients with binge eating disorder in primary care settings. *Comprehensive Psychiatry*, 54(3), 209-216.
- Griner, D., & Smith, T.B. (2006). Culturally adapted mental health interventions: A meta-analytic review. *Psychotherapy: Theory, Research, Practice, Training,* 43(4), 531-548.
- Groesz, L.M., McCoy, S., Carl, J., Saslow, L., Stewart, J., Adler, N., ... Epel, E. (2012). What is eating you? Stress and the drive to eat. *Appetite*, *58*, 717-721.
- Hargreaves, M.K., Schlundt, D.G., & Buchowski, M.S. (2002). Contextual factors influencing the eating behaviors of African American women: A focus group investigation. *Ethnicity & Health*, *7*(*3*), 133-147.

- Harrington, E.F., Crowther, J.G., & Shipherd, J.C. (2010). Trauma, binge eating, and the "strong Black woman". *Journal of Consulting and Clinical Psychology*, 78(4), 469-479.
- Hellstrom, P.M., Geliebter, A., Naslund, E., Schmidt, P.T., Yahav, E.K., Hashim, S.A., & Yeomans, M.R. (2004). Peripheral and central signals in the control of eating in normal, obese and binge-eating human subjects. *British Journal of Nutrition*, 92(Suppl1), S47-S57.
- Henrickson, H.C., Crowther, J.H., & Harrington, E.F. (2010). Ethnic identity and maladaptive eating: Expectancies about and thinness in African American women. *Cultural Diversity and Ethnic Minority Psychology*, *16(1)*, 87-93.
- Hilbert, A., Hildebrandt, T., Agras, W.S., Wilfley, D.E., & Wilson, G.T. (2015). Rapid response in psychological treatments for binge eating disorder. *Journal of Consulting and Clinical Psychology*, 83(3), 649-654.
- Hudson, J.I., Hiripi, E., Pope Jr., H.G., & Kessler, R.C. (2007). The prevalence and correlates of eating disorders in the national comorbidity survey replication. *Biological Psychiatry*, 61(3), 348-358.
- IBM Corp. (2013). *IBM SPSS Statistics for Windows, Version 22.0*. Armonk, NY: IBM Corp.
- James, D.C.S. (2004). Factors influencing food choices, dietary intake, and nutritionrelated attitudes among African Americans: Application of a culturally sensitive model. *Ethnicity and Health*, 9(4), 349-367.
- Jones, C., Bryant-Waugh, R., Turner, H.M., Gamble, C., Melhuish, L., & Jenkins, P.E. (2012). Who benefits from guided self-help for binge eating? An investigation into the clinical features of completers and non-completers. *Eating Behaviors*, 13, 146-149.
- Katzmarzyk, P.T., Bray, G.A., Greenway, F.L., Johnson, W.D., Newton Jr., R.L., Ravussin, E., ... & Bouchard, C. (2011). Ethnic-specific BMI and waist circumference thresholds. *Obesity*, 19,1272-1278.

- Kong, A., Tussing-Humphreys, L.M., Odoms-Young, A.M., Stolley, M.R., & Fitzgibbon, M.L. (2014). Systematic review of behavioral interventions with culturally adapted strategies to improve diet and weight outcomes in African American women. *Obesity Reviews*, 15(Suppl. 4), 62-92.
- Kroon Van Diest, A.M., Tartakovsky, M., Stachon, C., Pettit, J.W., & Perez, M. (2014). The relationship between acculturative stress and eating disorder symptoms: is it unique from general life stress?. *Journal of Behavioral Medicine*, 37, 445-457.
- Landis, J.R., & Koch, G.G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159-174.
- Landrine, H., & Klonoff, E.A. (1994). The African American acculturation scale: Development, reliability, and validity. *The Journal of Black Psychology*, 20(2), 104-127.
- Loeb, K.L., Wilson, G.T., Gilbert, J.S., & Labouvie, E. (2000). Guided and unguided self-help for binge eating. *Behavior Research and Therapy*, *38*, 259-272.
- Luppino, F.S., de Wit, L.M., Bouvy, P.F., Stijnen, T., Cujipers, P., Penninx, B.W., & Zitman, F.G. (2010). Overweight, obesity and depression: a systematic review and meta-analysis of longitudinal studies. *Archives of General Psychiatry*, *67(3)*, 220-229.
- Mathes, W.F., Brownley, K.A., Mo, X., & Bulik, C.M. (2009). The biology of binge eating. *Appetite*, *52(3)*, 545-553.
- McLeroy, K.R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, *15* (4), 351-377.
- Miller, W.R., & Rollnick, S. (2012). *Motivational interviewing: helping people change* (3rd ed.). New York, NY: The Guilford Press.
- Miranda, J., Bernal, G., Lau, A, Kohn, L., Hwang, W., & LaFromboise, T. (2005). State of the science on psychosocial interventions for ethnic minorities. *Annual Review of Clinical Psychology*, 1, 113-142.

- Mulholland, A.M., & Mintz, L.B. (2001). Prevalence of eating disorders among African American women. *Journal of Counseling Psychology*, 48(1), 111-116.
- O'Neil, S.K. (2003). African American women and eating disturbances: A meta-analysis. *Journal of Black Psychology*, 29(1), 3-16.
- Perez, M., & Joiner, T. (2003). Body image dissatisfaction and disordered eating in Black and White women. *International Journal of Eating Disorders*, 33, 342-350.
- Pike, K.M., Dohm, F., Striegel-Moore, R.H., Wilfley, D.E., & Fairburn, C.G. (2001). A comparison of black and white women with binge eating disorder. *American Journal of Psychiatry*, 158, 1455-1460.
- Prochaska, J., & DiClemente, C. (1983). Stages and processes of self-change in smoking: toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 5, 390-395.
- Prochaska, J., DiClemente, C., and Norcross, J.C. (1992). In search of how people change: Applications to addictive behaviors. *The American Psychologist*, 47(9), 1102-1114.
- QSR International Pty Ltd. (2015). NVIVO Qualitative Data Analysis Software, Version 10.2.1. Melbourne, Australia: QSR International Pty Ltd.
- Rizvi, S. L., Peterson, C. B., Crow, S. J., & Agras, W. S. (2000). *Test-Retest Reliability of the Eating Disorder Examination*. New York, NY: John Wiley & Sons, Inc.
- Robinson, T. (2008). Applying the socio-ecological model to improve fruit and vegetable intake among low-income African Americans. *Journal of Community Health, 33*, 395-406.
- Rounsaville, B. J., Carroll, K. M., & Onken, L. S. (2001). A stage model of behavioral therapies research: Getting started and moving on from Stage I. *Clinical Psychology: Science and Practice*, 8, 133-142.

- Shea, M., Cachelin, F., Urive, L., Striegel, R.H., Thompson, D., & Wilson, G.T. (2012). Cultural adaptation of a guided self-help program for Mexican American women with binge eating disorders. *Journal of Counseling and Development*, 90, 308-318.
- Striegel-Moore, R.H., Dohm, F.A., Kraemer, H.C., Taylor, C.B., Daniels, S.R., Crawford, P.B., & Shreiber, G. (2003). Eating disorders in white and black women. *American Journal of Psychiatry*, 160, 1326-1331.
- Striegel-Moore, R.H., Dohm, F.A., Pike, K.M., Wilfley, D.E., & Fairburn, C.G. (2002). Abuse, bullying, and discrimination as risk factors for binge eating disorder. *The American Journal of Psychiatry*, 159, 1902-1907.
- Striegel-Moore, R.H., Wilson, G.T., DeBar, L., Perrin, N., Lynch, F., Rosselli, F., & Kramer, H.C. (2010). Cognitive-behavioral guided self-help for the treatment of recurrent binge eating. *Journal of Consulting and Clinical Psychology*, 78(3), 312-321.
- Sulkowski, M.L., Dempsey, J., & Dempsey, A.G. (2011). Effects of stress and coping on binge eating in female college students. *Eating Behaviors*, 14(3), 188-191.
- Takacs, D. (2003). How does your positionality bias your epistemology? *Thought & Action, 19(1), 27-38.*
- Taylor, J.Y., Caldwell, C.H., Baser, R.E., Faison, N., & Jackson, J.S. (2007). Prevalence of eating disorders among blacks in the national survey of American life. *International Journal of Eating Disorders*, 40(Suppl), S10-S14.
- Taylor, A.E., Hubbard, J., & Anderson, E.J. (1999). Impact of binge eating on metabolic and leptin dynamics in normal young women. *Journal of Clinical Endocrinology and Metabolism*, *84(2)*, 428-434.
- Thompson, B.W. (1992). "A way outa no way": Eating problems among African-American, Latina and white women. *Gender & Society*, 6(4), 546-561.

- Thompson-Brenner, H., Franko, D.L., Thompson, D.R., Grilo, C.M., Boisseau, C.L., Roehrig, J.P., ... Wilson, G.T. (2013). Race/ethnicity, education, and treatment parameters as moderators and predictors of outcomes in binge eating disorder. *Journal of Consulting and Clinical Psychology*, 81(4), 710-721.
- UNCC. (2013). UNC Charlotte campus diversity plan progress report: Winter 2012-2013. Retrieved from https://diversity.uncc.edu/sites/diversity.uncc.edu /files/media/ Diversity-Plan-Progress-Report-Winter-2012-2013.pdf
- United States Department of Health and Human Services. (2010). *Maintaining a healthy weight on the go: A pocket guide*. Retrieved from http://www.nhlbi.nih.gov/files/docs/public/heart/AIM_Pocket_Guide_tagged.pdf
- United States Department of Health and Human Services. (2001). Mental health care for African Americans. In *Mental health: culture, race and ethnicity-A supplement to mental health: a report of the surgeon general* (pp 51-76). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Watson, L.B., Ancis, J.R., White, D.N., & Nazari, N. (2013). Racial identity buffers African American women from body image problems and disordered eating. *Psychology of Women Quarterly*, 37(3), 337-350.
- Wells, A.M., Garvin, V., Dohm, F., Striegel-Moore, R.H. (1997). Telephone-based guided self-help for binge eating disorder: A feasibility study. *International Journal of Eating Disorders*, 21(4), 341-346.
- Whaley, A.L., & Davis, K.E. (2007). Cultural competence and evidence-based practice in mental health services. *American Psychologist*, 62(6), 563-574.
- Wilkinson, D., & Birmingham, P. (2003). Using research instruments: A guide for researchers. New York, NY: RoutledgeFalmer.
- Wilson, P.L., O'Connor, D.P., Kaplan, C.D., Bode, S., Mama, S.K., & Lee, R.E. (2012). Relationship of fruit, vegetable, and fat consumption to binge eating symptoms in African American and Hispanic or Latina women. *Eating Behaviors*, 13(2), 179-182.

- Wilson, G.T., Grilo, C.M., & Vitousek, K.M. (2007). Psychological treatment of eating disorders. *American Psychologist, 62(3),* 199-216.
- Wilson, G.T., Wilfley, D.E., Agras, W.S., & Bryson, S.W. (2010). Psychological treatments of binge eating disorder. *Archives of General Psychiatry*, 67(1), 94-101.
- Wilson, G.T., & Zandberg, L.J. (2012). Cognitive-behavioral guided self-help for eating disorders: Effectiveness and scalability. *Clinical Psychology Review*, *32*, 343-357.
- Yancey, A.K., Ortega, A.N., & Kumanyika, S.K. (2006). Effective recruitment and retention of minority research participants. *Annual Review of Public Health*, *27*, 1-28.

Goals	Inputs	Activities	Outputs	Outcomes
To obtain feedback from AA women with BE in order to make cultural adaptations to the CBTgsh intervention	- Research Staff - CBTgsh manual - A community sample of 16 AA women	 Research staff conducted 8 focus groups with approximately 2 women in each group to get feedback on the CBTgsh manual Research staff analyze focus group data to explore recommendations for adaptation 	Participants provided feedback on needed changes to CBTgsh manual	Recommendations are available to preliminarily adapt the CBTgsh manual

APPENDIX A: LOGIC MODEL

APPENDIX B: LIST OF CODES

Alternatives to BE BE and Addiction BE is private Black Women not Represented **BMI** Chart **Compensatory Behaviors** Definition of BE Dieting and Restricting Eating habits trained **Exercise and Physical Activity** Familv Feeling Bloated Fit the person Focus on Health Food as Reward Healthy Eating Helpful & Strengths Benefits of Problem Solving Easy to Understand Manual as a reference Influence of Income Meal Planning Minority Preference for Curves

Monitoring **Monitoring Beneficial** Monitoring Complicated Motivation for change Acceptance **Overeating Acceptable** Portion Control **Psychological States and BE Realistic Examples Religion and Spirituality** Repetition Rude to reject food Self Diagnosing Social Media Influence Standards of Beauty Thin Ideal or Barbie Doll Svndrome Steps Only Support **Technology for Food Monitoring** Time of Day of Large Meals TV as a BE trigger **Unhelpful & Suggestions** Weighing Weight Loss

* Indented codes are sub-codes of the preceding left aligned code.