

7-25-2014

Treatment for eating disorders with emphasis on risk factors and special consideration for minorities

Katherine Morgan Raineri
Pacific University

Recommended Citation

Raineri, Katherine Morgan (2014). Treatment for eating disorders with emphasis on risk factors and special consideration for minorities (Master's thesis, Pacific University). Retrieved from:
<http://commons.pacificu.edu/spp/1136>

This Thesis is brought to you for free and open access by the Theses, Dissertations and Capstone Projects at CommonKnowledge. It has been accepted for inclusion in School of Professional Psychology by an authorized administrator of CommonKnowledge. For more information, please contact CommonKnowledge@pacificu.edu.

Treatment for eating disorders with emphasis on risk factors and special consideration for minorities

Abstract

Eating disorders have increased drastically in recent decades. They are also the deadliest of all psychological disorders. To date, research has elucidated successful treatment procedures for particular eating disorders (e.g., Binge Eating Disorder and Bulimia Nervosa), but struggled to identify efficacious treatment for others (e.g., Anorexia Nervosa). Eating disorders are often accompanied by serious health repercussions, making treatment efficacy and efficiency more imperative. Up until recently, research on eating disorders has focused almost solely on Caucasian, middle-class females. However, recent research indicates eating disorders are also prevalent in minority groups, and treatment specifications for these groups are limited. It is an ethical responsibility to provide the best care to clients, and without proper cultural consideration for minority groups and subsequent tailored interventions, minorities will continue to receive subpar care. This paper reviews etiological factors for eating disorders, identifies current treatment standards, and suggests cultural influences that may impact treatment among females.

Degree Type

Thesis

Rights

[Terms of use for work posted in CommonKnowledge.](#)

Comments

Library Use: LIH

Copyright and terms of use

If you have downloaded this document directly from the web or from CommonKnowledge, see the “Rights” section on the previous page for the terms of use.

If you have received this document through an interlibrary loan/document delivery service, the following terms of use apply:

Copyright in this work is held by the author(s). You may download or print any portion of this document for personal use only, or for any use that is allowed by fair use (Title 17, §107 U.S.C.). Except for personal or fair use, you or your borrowing library may not reproduce, remix, republish, post, transmit, or distribute this document, or any portion thereof, without the permission of the copyright owner. [Note: If this document is licensed under a Creative Commons license (see “Rights” on the previous page) which allows broader usage rights, your use is governed by the terms of that license.]

Inquiries regarding further use of these materials should be addressed to: CommonKnowledge Rights, Pacific University Library, 2043 College Way, Forest Grove, OR 97116, (503) 352-7209. Email inquiries may be directed to: copyright@pacificu.edu

EATING DISORDERS TREATMENT

TREATMENT FOR EATING DISORDERS WITH EMPHASIS ON RISK FACTORS AND
SPECIAL CONSIDERATION FOR MINORITIES

A THESIS

SUBMITTED TO THE FACULTY

OF

SCHOOL OF PROFESSIONAL PSYCHOLOGY

PACIFIC UNIVERSITY

HILLSBORO, OREGON

BY

KATHERINE MORGAN RAINERI

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

MASTER OF SCIENCE IN CLINICAL PSYCHOLOGY

JULY, 25 2014

APPROVED:

Katherine A. Elder, PhD

EATING DISORDERS TREATMENT

ABSTRACT

Eating disorders have increased drastically in recent decades. They are also the deadliest of all psychological disorders. To date, research has elucidated successful treatment procedures for particular eating disorders (e.g., Binge Eating Disorder and Bulimia Nervosa), but struggled to identify efficacious treatment for others (e.g., Anorexia Nervosa). Eating disorders are often accompanied by serious health repercussions, making treatment efficacy and efficiency more imperative. Up until recently, research on eating disorders has focused almost solely on Caucasian, middle-class females. However, recent research indicates eating disorders are also prevalent in minority groups, and treatment specifications for these groups are limited. It is an ethical responsibility to provide the best care to clients, and without proper cultural consideration for minority groups and subsequent tailored interventions, minorities will continue to receive subpar care. This paper reviews etiological factors for eating disorders, identifies current treatment standards, and suggests cultural influences that may impact treatment among females.

EATING DISORDERS TREATMENT

ACKNOWLEDGEMENTS

There are several people, without whom, this thesis would not have been possible. First and foremost, I would like to thank Dr. Katherine Elder, my advisor and chair, for her guidance, flexibility, and editing. I would like to thank Dr. Paul Michael for his support and assistance with this project when the topic was just developing. I would also like to thank Jillian Freitas, who assisted with endless editing, formatting, and creative adjustments. Finally, I would like to thank all faculty, family members, and friends who supported me over the last year as I worked to complete this project.

EATING DISORDERS TREATMENT

TABLE OF CONTENTS

	Page
ABSTRACT	ii
ACKNOWLEDGMENTS	iii
LIST OF TABLES	iv
INTRODUCTION	1
Definition of Eating Disorders	1
Definition of Minority	3
Definition of Treatment	3
ETIOLOGY AND RISK FACTORS	3
GOLD STANDARD TREATMENT FOR EATING DISORDERS	7
Anorexia Nervosa	7
Bulimia Nervosa	9
Binge Eating Disorder	10
ALTERNATIVE TREATMENTS	11
Psychopharmacology	11
Prevention Programs	13
SPECIAL CONSIDERATION FOR MINORITIES	13
African Americans	14
Latina Americans	15
Asian Americans	16
Native Americans	16
Additional Factors in Cross-Cultural Eating Disorder Research	17

EATING DISORDERS TREATMENT

CONCLUSION 20

REFERENCES 21

Introduction

Research related to prevention and treatment of eating disorders has increased over recent decades. However, research tends to focus on “majority” culture – that is, Caucasian, educated, females – leaving racial and ethnic minorities largely unstudied. The limited research that exists on minorities and eating disorders suggests that minorities experience eating disorders at different rates, present symptoms (both internalized and externalized) differently, encounter different barriers to diagnosis and treatment-seeking, and respond differently to treatment modalities than do Caucasian females (Anthony & Yager, 2007; Crago, Shisslak, & Estes, 1996; Striegel-Moore et al., 2003; Thompson-Brenner et al., 2013; Toro et al., 2006). Moreover, ethnic minorities are commonly underdiagnosed and, thus, may experience a higher severity of symptomology before physicians and psychologists recommend treatment (Gordon, Perez, & Joiner, 2001; Silber, 1986). These discrepancies and differences suggest the need for tailored interventions for minority women and adolescents. In this article, I will examine the existing literature on treatment of eating disorders, consider risk factors and etiology, and give special consideration to treatment with minority populations.

Definition of Eating Disorders

The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; *DSM-5*; American Psychiatric Association, 2013) defines eating disorders as a “persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial functioning” (p. 329). The *DSM-5* states that the different diagnosable eating disorders are anorexia nervosa, bulimia nervosa, binge-eating disorder, and other specified feeding or eating disorder (*DSM-5*, 2013).

Anorexia nervosa (AN) has historically been characterized by a refusal to stay at a healthy body weight, an intense fear of gaining weight or becoming fat, an excessive preoccupation with how one looks, and amenorrhea in females (Erguner-Tekinalp & Gillespie, 2010). However, in the recent release of the *DSM-5*, the criterion of amenorrhea in females has been removed. There are two subtypes of AN: restricting type and binge-purge type, which further specify whether the individual engages primarily in dieting, or compensatory behaviors, respectively. New diagnostic criteria in the *DSM-5* also include specifiers for remission status (e.g., in partial remission, in full remission) as well as severity of the disorder, which is based on body mass index (e.g., mild, moderate, severe, or extreme). Recent studies have determined that the lifetime prevalence of AN by 20 years of age is 0.8% (Stice, Marti, & Rohde, 2013).

Bulimia nervosa (BN) is characterized by recurrent episodes of binge eating, followed by “inappropriate compensatory behaviors” to eliminate the food that was just eaten (Erguner-Tekinalp & Gillespie, 2010, p. 69). This can include the use of laxatives, vomiting, excessive exercise, or diuretics. Diagnostic criteria for BN also include specifiers for remission status and severity of symptoms. BN is more common than AN, with an estimated lifetime prevalence of 2.6% by 20 years of age (Stice, Marti, & Rohde, 2013).

With the advent of the *DSM-5*, Binge Eating Disorder (BED) was formally recognized as an eating disorder. BED is characterized by repeated episodes of binge eating, without the use of compensatory behaviors. Moreover, the eating episodes occur with regularity, and are associated with feelings of embarrassment, guilt, and/or depression. Again, diagnostic criteria for BED include specifiers for remission status and severity of symptoms. BED has the highest lifetime prevalence rate of 3.0% by age 20 (Stice, Marti, & Rohde, 2013).

Additionally, Other Specified Feeding or Eating Disorder (OSFED) is a broad diagnosis for individuals who exhibit clinically distressing eating disorder pathology, but do not meet all of the criteria for AN, BN, or BED. This diagnosis encapsulates individuals who may exhibit a limited number of symptoms to a significantly distressing degree, or exhibit disordered eating for a limited period of time.

Definition of Minority

For the purposes of this paper, the term “minority” will refer to any individual belonging to a racial or ethnic group other than Caucasian. This is because the majority of the literature on eating disorders has historically focused on Caucasian females.

Definition of Treatment

The definition of treatment within this paper will refer to evidence-based treatment, as defined by the American Psychological Association (APA) in 2005:

Evidence-based practice in psychology (EBPP) is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences. . . . to promote effective psychological practice and enhance public health by applying empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention. (p. 7)

Etiology and Risk Factors

A variety of factors converge to contribute to the etiology of eating disorders – e.g., genetics, physiology, neurotransmitter activity, and environmental stressors. Research studies continue to point to the role of genetics in the development of an eating disorder. In fact, twin studies have shown extremely high heritability rates of eating disorders (Kortegaard et al., 2001). In fact, Kortegaard (2001) and associates found the heritability rates to range between 48% and

61% among dizygotic and monozygotic twins, depending on the type of measurement tool used (i.e., narrow or broadband measure). Research conducted by Kipman, Gorwood, Mouren-Simeoni, and Ades (1999) found that heritability rates of eating disorders among dizygotic twins was closer to 12.5%, whereas monozygotic twins have heritability rates closer to 44%, suggesting that genes play an integral role in the development of eating disorders. It is important to note that eating disorders can also be considered a transactional process between genetics and environment (Combs, Smith, Flory, Simmons, & Kelly, 2010). Researchers have found that individuals with eating disorders may have an overabundance of serotonin, which may predispose them to mood and appetite problems (Kaye, 2008). Levels of dysregulated serotonin can increase levels of perfectionism and impulsivity, which are correlated with eating disorders (Steiger, 2004). Moreover, Combs et al. (2010) suggest that genetic predisposition to the onset of an eating disorder, combined with environmental contributions, such as reinforcement from dieting, and societal pressure to maintain a particular body type, may increase the likelihood that an individual will acquire an eating disorder. For individuals with increased levels of serotonin, perfection can be “achieved” through the increase in self-esteem that comes from losing weight (Brockmeyer et al., 2013). Additionally, earlier pubertal maturation and a higher body fat content are both linked to onset of eating disorder pathology (Graber, Brooks-Gunn, Paikoff, & Warren, 1994). Psychological comorbidity is high, especially with depression, anxiety disorders, and obsessive-compulsive disorder, which illuminates the biological underpinnings of these disorders (Measelle, Stice, & Hogansen, 2006).

Past research has evaluated the role socioeconomic status (SES) plays in the development of an eating disorder. Unlike many developmental disorders, some eating disorders – most notably AN – are more common among individuals of higher SES status, while other eating

disorders – specifically BED – may be more common among lower SES populations (Franko et al., 2011; Paxton, Eisenberg, & Neumark-Sztainer, 2006). Family members can also directly influence the prevalence of eating pathology. Individuals whose families place excessive importance on diet, weight, and appearance are at an increased risk for the development of eating disorders (Paxton et al., 2006). Families can reverse these effects by placing an importance on family mealtime, and working to encourage more positive eating habits and attitudes. However, if the family has interpersonal difficulties or poor eating habits, family mealtimes may increase risk. For example, if parental care is maladaptive or high in conflict, family mealtimes can actually be a risk factor for disordered eating (Wilksch & Wade, 2010).

Sociocultural contributions to eating disorder development are vast. Having peers who experience an eating disorder or are obsessed with their weight and appearance is a risk factor for developing an eating disorder (Paxton et al., 2006). Being teased by peers about one's appearance or weight can also negatively affect eating patterns (Paxton et al., 2006; Olvera, Dempsey, Gonzalez, & Abrahamson, 2013). Social support deficits predict higher rates of body dissatisfaction, which is one of the leading risk factors for the development of an eating disorder (Stice & Whitenton, 2002). Additionally, cultural values appear to be very influential in body acceptance (Erguner-Tekinalp & Gillespie, 2010). These include the cultural ideals of thinness, and whether a person buys into the thin-ideal. Celebrities and the media portray images that are unrealistic and practically unattainable, so resisting that message is crucial in preventing the onset of eating disorders (Stice & Whitenton, 2002).

Experimenting with dieting appears to be a risk factor for the development of binge eating and bulimia nervosa (Racine, Burt, Iacono, McGue, & Klump, 2011). This is especially true for individuals who are already genetically predisposed to developing an eating disorder. A high rate

of body dissatisfaction in early life is a strong predictor for the onset of an eating disorder (Paxton et al., 2006). Other radical weight control behaviors such as laxative abuse, “yo-yo” dieting, and engaging in fad diets have all been shown to put individuals at risk for obesity and binge eating (Stice, Presnell, Shaw, & Rohde, 2005). Sexual abuse or bullying also tends to lead to higher rates of eating disorders (Wilksch & Wade, 2010). Research has shown that the latter leads to eating disorder pathology because girls who are teased or bullied tend to diet frequently, or binge eat to comfort themselves (Wilksch & Wade, 2010).

An additional significant risk factor for eating pathology is gender. AN and BN affect female adolescents and women at an alarmingly higher rate than boys and men. Part of this difference may be attributed to the unrealistic ideal body expectations from media and societal influences. Moreover, recent fMRI research has illuminated the fact that there may be gender differences in the processing of sociocultural pressure to change one’s body. Females tend to be more sensitive to such messages, perhaps due to cognitive schemas that are developed within rigid and judgmental cultural frameworks (Owens, Allen, & Spangler, 2010).

Streigel-More and Cachelin (2001) elucidated specific risk factors for the onset of BN, including “childhood and parental obesity, premorbid psychiatric disorder, poor parenting, parental psychiatric disorders, and physical and sexual abuse” (p. 649). Bodell, Joiner, and Ialongo (2012) found evidence within their study that impulsivity as a child, combined with any of the aforementioned factors, was also a significant risk factor for the onset of BN.

In addition to identifying risk factors specific to BN, Streigel-Moore and Cachelin (2001) also identified risk factors for the development of AN. These included familial factors such as “inadequate parenting, frequent house moves, high parental expectations, and a parental history of AN or BN” (p. 650). Personal risk factors included “perfectionism, low self-esteem, severe

personal health problems, a history of deliberate self-harm, major depression, [and] premorbid drug abuse” (p. 650). Their research also suggested that lack of close friendships and physical or sexual abuse could also be risk factors for the development of AN.

Gold Standard of Treatment for Non-Minorities

Treatment for Anorexia Nervosa

AN is consistently cited as the psychiatric disorder with the highest mortality rate (Agras et al., 2004). There is an intractable quality to AN, and successful treatment is often intensive and long-term. As previously mentioned, the prevalence of AN is quite low (Stice, Marti, & Rohde, 2012); however, for those who meet criteria, the condition is often chronic with periodic relapses and need more intensive treatment to restabilize weight and other symptoms. All of these components make it an inherently difficult disorder to study in controlled settings.

However, there are several methods that have been supported by research and are commonly used in clinical practice. Specifically, randomized controlled trials support the use of Cognitive Behavioral Therapy (CBT) or family therapy (i.e., the Maudsley method).

CBT for AN involves targeting the maladaptive thought patterns that reinforce distorted body image and maintain restrictive eating patterns. In a review conducted by Wilson, Grilo, and Vitousek (2007), the authors referenced six studies that examined the efficacy of CBT for AN. The authors note that the results were difficult to interpret because four of the studies significantly altered the CBT methodology, and the remaining two studies had attrition rates that were too high to allow for accurate interpretation of results. In addition, the comparison groups that were used in these studies were relatively weak; instead of alternative forms of therapy, such as interpersonal therapy (IPT) or dialectical behavior therapy (DBT), the researchers used control groups that relied on pharmacology and nutritional training. By failing to compare various forms

of therapeutic interventions, the study results cannot indicate the efficacy of any particular therapy process. Regardless of the outcome of these studies, Wilson et al. (2007) cited motivational interviewing as a key component of the treatment of AN. Moreover, the researchers stated that researching and treating this population requires knowledge of the unique health concerns related to starvation and weight restoration.

In 2004, the National Institute for Clinical Excellence (NICE) released guidelines for the treatment of AN, BN, and BED. Their research also noted that “convincing evidence is lacking on the most effective form of psychological therapy” for AN, and yet “psychological therapy is nevertheless crucial in addressing the underlying behaviours and cognitions” (p. 80) in clients with AN. Their findings reiterated the theme that there is limited evidence that a specific form of psychological treatment is superior to another. Instead, they focused on the need to offer some form of “cognitive analytic therapy (CAT), cognitive behavior therapy (CBT), interpersonal therapy (IPT), focal psychodynamic therapy, [or] family interventions focused explicitly on eating disorders” (p. 90). They also noted that weight restoration and nutritional counseling are adjunct components of the treatment process. However, despite these summary statements for the treatment of AN, they assigned a “grade” of “C” to every treatment recommendation apart from the recommendation for family therapy in children and adolescents with AN, which received a grade of “B.” Based on their grading rubric, a grade of “B” indicates “evidence obtained from at least one well-designed controlled study without randomization” and a grade of “C” indicates “evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities” (p. 55). A grade of “A” indicates evidence from a randomized controlled trial (RCT), a grade which none of the specific AN treatments has received to date.

As stated in the NICE (2004) guidelines, there is growing evidence for the efficacy of family therapy as a treatment for AN. This is increasingly popular with child and adolescent populations, but is also suggested for adults with AN. One of the most commonly researched forms of family therapy for AN is the Maudsley method, which involves family therapy sessions typically spread over the course of one year (Wilson, Grilo, & Vitousek, 2007). In addition, the beginning of treatment focuses on encouraging parental control over food intake without input from the client. Once weight restoration has taken place, the emphasis of control slowly shifts to the client. When this treatment modality was initially tested, study outcomes exhibited a 90% recovery rate even at 5 years post-treatment (Russell, Szmukler, Dare, & Eisler, 1987). More recently, family-based therapies have been catalogued as “probably efficacious” based on inconsistencies and limitations in randomized clinical trials (Lock et al., 2010; Smith & Cook-Cottone, 2011). While research on family-based treatment for AN is promising, conclusions drawn by researchers diverge somewhat about the efficacy of family therapy, thereby illuminating the need for additional research in this area.

Treatment for Bulimia Nervosa

CBT treatment modalities for BN were introduced in parallel form to CBT treatment for AN. Whereas CBT for AN has had mixed results, CBT has been found to be incredibly successful with clients who experience BN. CBT has since been adapted to treat all forms of eating disorders, since it appears to be the most efficacious treatment approach across a number of randomized controlled clinical trials (Cooper & Fairburn, 2011). In fact, in one study more than two-thirds of the participants achieved full or partial remission after receiving 40 sessions of CBT (Byrne, Fursland, Allen, & Hunna, 2011). Furthermore, the NICE (2004) treatment guidelines for BN give CBT a grade of “A,” indicating that there is evidence of treatment

efficacy from randomized controlled trials. Their review of the literature suggests specifically focused CBT for BN should last 16-20 sessions over the course of 6 months. An additional factor in the effective treatment of an eating disorder is the therapeutic alliance between patients and their treatment team. Research has shown that the therapeutic alliance is highly important for treatment outcome when treating an eating disorder (Constantino, Arnow, Blasey, & Agras, 2005).

Another widely accepted form of therapy for BN is interpersonal therapy (IPT). Although this is not generally recommended as the first line of therapy, it can be used as secondary treatment. Whereas CBT is used to identify maladaptive thoughts and behaviors that maintain the eating disorder, IPT is used to identify interpersonal problems that may be maintaining the eating disorder (Wilfley et al., 2002). In addition, IPT may require a significantly longer duration of treatment than CBT and may take up to 12 months to reach equivalent rates of efficacy of CBT (NICE, 2004).

Treatment for Binge Eating Disorder

CBT has also been studied with individuals who experience BED, and is considered the preferred treatment for BED (Wilson, Grilo, & Vitousek, 2007). NICE (2004) guidelines gave CBT for BED a grade of “A” and state that it should be the first line of treatment for BED. Similar to CBT for BN, CBT for BED focuses on the reduction of binge eating episodes through targeting cognitions and behaviors that maintain the maladaptive eating pattern.

Other forms of psychotherapy, including interpersonal therapy (IPT) and dialectical behavior therapy (DBT) for BED received a grade of “B” from the NICE (2004) guidelines. According to this rating, although IPT and DBT have demonstrated efficacy in non-randomized

clinical trials, they should be used only if specific factors of the client align with the treatment modality, or if CBT efforts have already been exhausted.

Of note, all of the aforementioned treatment modalities for BED do not necessarily produce weight loss, but rather a reduction in eating disorder symptom presentation (e.g., loss of control, undue concern with weight and shape; Wilson, Grilo, & Vitousek, 2007). Thus, it is necessary to have a conversation with clients to dispel the idea that treatment of binge eating symptoms will result in significant weight changes.

Alternative Treatment Methods

Psychopharmacology

The use of psychopharmacology in the treatment of eating disorders is still in the early stages of research. It is not uncommon for psychiatrists to prescribe medication as adjunct treatment, and while there is support for the efficacy of SSRIs with BN, psychopharmacological interventions with AN do not appear to have benefits (Attia, Haiman, Walsh, & Flater, 1998; NICE, 2004).

Medication should not be the first line of treatment for AN, according to the NICE (2004) guidelines, which gave psychotropic medication a grade of “C.” The authors stated that even with the use of medication in AN, special consideration should be given to side effects in this fragile population. Specifically, medications that alter cardiovascular functioning, such as antipsychotics, tricyclic antidepressants, particular antibiotics and antihistamines, should be used with extreme caution. Some providers are recommending the use of vitamin and mineral supplements in place of psychotropic medication to balance electrolyte, mineral, and vitamin levels before recommending medication (NICE, 2004). Additionally, a randomized, placebo-controlled, double-blind research study conducted by Attia et al. (1998) suggested that SSRIs do

not aid in weight restoration or improve psychological functioning for clients who have low body weight and suffer from AN. Conversely, research conducted by Bissada, Tasca, Barber, and Bradwejn (2008) found that the atypical antipsychotic, olanzapine, may be beneficial in improving the rate of weight gain for individuals with low body weight. Thus, in combination with the NICE (2004) guidelines, medication management in AN should not be the first line of treatment, but may yield benefits depending on the particular client and medication formula.

The NICE (2004) guidelines provided similar recommendations regarding the use of medications for BN by rating selective serotonin reuptake inhibitors (SSRIs) with a grade of “C.” fluoxetine (Prozac) is the most widely studied SSRI for BN, and is purported to reduce the binge/purge cycle. However, even with the use of fluoxetine, the binge/purge cycle will not be eliminated. Thus, therapy in conjunction with medication would be the preferred route if medication is being considered. Additionally, a higher dosage of fluoxetine is needed to treat BN than would typically be needed for depression.

SSRIs can also be used to reduce binge eating in BED. The NICE (2004) guidelines gave this treatment method a grade of “B.” This ranking was given because SSRIs appear to reduce bingeing symptoms in clients with BED. However, in a randomized, double-blind placebo-controlled comparison of CBT and fluoxetine, Grilo, Masheb, and Wilson (2005) found that CBT is significantly more efficacious for the treatment of BED. Thus, medication management may best be utilized as adjunct treatment for BED.

In sum, although specific medication may alleviate portions of the symptom presentation in AN, BN, and BED, research outcomes suggest a medication regimen is best utilized in combination with psychotherapy focused on the specific disorder.

Prevention Programs

In both research and practice, prevention programs are on the rise as a means of mitigating the development of eating disorders. One such program utilizes cognitive dissonance-based eating disorder prevention programs to reduce the internalization of the thin-ideal portrayed by the media (McMillan, Stice, & Rohde, 2011). This prevention technique requires participants to actively challenge the thin-ideal, and the theory is that this creates dissonance between what they think and how they behave. As a result, behaviors should change to match their thoughts. In a randomized study evaluating this approach, the use of higher levels of dissonance produced lower levels of eating disorder symptomology than programs that utilized a low level of dissonance (McMillan et al., 2011). Meta-analytic studies are promising and have illuminated the efficacy of many of these prevention programs, but longitudinal studies will need to examine the long-term effects of these programs with adolescents (Stice, Becker, & Yokum, 2013).

Special Consideration for Minorities

There is limited data to suggest efficacy of evidence-based treatment strategies for eating disorders in ethnic minorities (Shea et al., 2012). However, experts theorize that this is largely due to the lack of research focusing on specific minorities, rather than being an indication that the treatments would not, or do not, work with minority populations.

In order to examine the research more thoroughly, a comprehensive systematic search was conducted using PsycINFO on February 2, 2014 using the search terms “Eating Disorder AND Minority” and “Eating Disorder AND Treatment.” These search terms yielded 84 articles. To stay within the scope of content, 42 articles were discarded because they were irrelevant to the topic being examined. Exclusionary criteria included: studies about males, studies that examined eating disorders without mention of minorities, and studies that made no mention of

eating disorders or minorities. Additionally, 15 articles in the second search were duplicates from the first search, which left 27 articles to review. The following section summarizes themes that were found within the literature review.

African American Women

African American women do not appear to experience eating disorders at the same rates as Caucasian women (Striegel-Moore et al., 2003). Specifically, the prevalence of AN and BN is much lower in African American women than in Caucasian women. Even when African American women experience eating pathology, they are not likely to seek treatment for their eating concerns. Even if they do seek treatment, they are twice as likely as Caucasians to drop out before achieving a state of recovery (Thompson-Brenner et al., 2013). Thompson-Brenner et al. (2013) suggest that a combination of factors such as lack of access, stigma concerns (including racial discrimination), and financial difficulties, may all contribute to the discrepancy between Caucasian women and African American women seeking and receiving treatment. In a study conducted by Franko et al. (2012), African American women who sought and completed treatment faced greater fear of weight gain than their Caucasian counterparts, regardless of their current weight. BED is the most common eating disorder among African American females (Marques et al., 2011; Smith 1995; Taylor, Caldwell, Baser, Faison, & Jackson, 2007). Although the rates of occurrence are not significantly higher than those of Caucasian women, BED appears to be more prevalent than AN or BN in this population (Marques et al., 2011). The prevalence of BED as the most common eating disorder within this culture may be due to cultural perceptions of body size that are discrepant from typical Caucasian body ideals, or because BED is one of the more prevalent eating disorders across all races (Cachelin, Rebeck, Veisel, & Striegel-Moore, 2001). In a randomized controlled multi-site study, Chui, Safer, Bryson, Agras, and Wilson

(2007) found interpersonal therapy (IPT) to be more efficacious for African American females than Caucasian females. However, Chui et al. (2007) stated that the sample size of African Americans within their study was quite small, and replication studies would need to be conducted to clarify whether IPT is superior to CBT for African American women.

Latina American Women

For the purposes of this paper, the term “Latina American” will encompass women who originate from all parts of Central and South America, the Caribbean, or Spanish-speaking countries (e.g., Spain). Although this combination of ethnic groups does not allow us to understand the vast within-group variability of cultural practices and identity, it allows us to look at the cultural practices of these groups in aggregate. Literature about Latina American women indicates that BED and BN are the most common eating disorders in this population, and occur at similar rates to Caucasian females (Anthony & Yager, 2007; Crago, Shisslak, & Estes, 1996; Shea et al., 2012; Toro et al., 2006). One study conducted by Gentile, Raghavan, Rajah, and Gates (2007) showed that Latina American women experienced significantly greater distress related to body image than other minorities. However, several studies have shown that they experience less overall internalization of the thin-ideal, indicating that overall thinness may not be the ideal body type for Latina American women (Forcano et al., 2008; Shaw, Ramirez, Trost, Randall, & Stice, 2004). In fact, research has pointed to specific body image concerns within different groups within the Latina American culture. Specifically, research conducted by Toro et al. (2006) reported Mexican girls preferred thinner arms, whereas Spanish girls preferred thinner hips. Moreover, Spanish girls in the study reported more body dissatisfaction, but Mexican girls were more likely to be actively dieting. Both Spanish females and Mexican females used fewer aggregate compensatory behaviors than Caucasian females. Thus, their body dissatisfaction did

not always lend itself to disordered eating. Some researchers theorize there may be a greater emphasis on caring for others within Latina culture than caring for the self, which acts as a buffer against the development of harmful eating habits and compensatory behaviors (DeLeel, Hughes, Miller, Hipwell, & Theodore, 2009).

Asian American Women

Eating disorders reportedly occur less frequently in Asian American women than they do in Caucasian women (Anthony & Yager, 2007; Crago, Shisslak, & Estes, 1996; Toro et al., 2006). However research conducted by Chen, Mond, and Kumar (2010) found that women of Singaporean descent are less able to recognize the symptoms of an eating disorder, and may mislabel eating pathology. Thus, whether rates of eating disorders are truly lower in Asian American women than Caucasian women is unknown. Additionally, Asian American women tend to be more reluctant to seek treatment, especially from psychiatrists, and some studies suggest Asian American women may not have positive perceptions of the use of medication (Chen, Mond, & Kumar, 2010). Therefore, even if they identify as having an eating disorder, they may rely on familial support rather than outside medical support (Chen, Mond, & Kumar, 2010). Asian American women experience a higher level of internalization of the thin-ideal than other minorities, suggesting a Westernized image of the ideal body type (Forcano et al., 2008; Shaw, Ramirez, Trost, Randall, & Stice, 2004).

Native American Women

Rates of eating disorders within Native American women are higher than in Caucasian females (Anthony & Yager, 2007; Crago, Shisslak, & Estes, 1996; Toro et al., 2006). BED is said to be the most common disorder within this group; however, very little research on this specific minority population exists (Anthony & Yager, 2007). Research within this population is

more difficult to conduct, as many Native American women live on reservations or pueblos. Moreover, distrust by Native Americans toward the majority culture (i.e., Caucasians, researchers, or medical providers) is understandably high due to historical mistreatment, trauma, and genocide. This may lead to less treatment seeking and unreliable estimates of the rates of eating disorders within this minority group (Anthony & Yager, 2007).

In sum, barriers to treatment include access to care (e.g., treatment is too far away or too expensive), as well as concerns about stigma, prejudice, and discrimination – both present day and historical (Becker, Arrindell, Perlow, Fay, & Striegel-Moore, 2010). In addition, ethnic minorities are less likely to have an eating disorder detected, regardless of the severity of their symptoms (Becker, Franko, Speck, & Herzog, 2002). Last, several studies have suggested that some ethnic minority women may be influenced by Western conceptions of beauty and thinness, which highlights the need for future research to focus on the roles of acculturation and Western media exposure in redefining beauty ideals.

Additional Factors in Cross-Cultural Eating Disorder Research

Correlational research has indicated that there is a significant link between mass media exposure and body dissatisfaction, with increased exposure leading to greater body dissatisfaction and an increase in eating disorder symptomology (Calado, Lameiras, Sepulveda, Rodriguez, & Carrera, 2011). Adolescents who were exposed to weight loss and nutritional supplement advertisements had adverse reactions to their own bodies. Girls who were told that they should lose weight to fit social norms had increasing levels of body dissatisfaction (Goodwin, Haycraft, & Meyer, 2011). However, whether or not this correlational research holds true across varying racial and ethnic minority groups remains to be evaluated. Media content tends to reflect the majority culture – in the U.S., “Caucasian culture” – and this discrepancy

may actually provide a buffer against self-comparison for members of ethnic minority groups. “However, meta-analyses have indicated that ethnic group differences on measures of body dissatisfaction and disordered eating are small or nonexistent . . . suggesting that not all members of specific minority groups are buffered” (Sabik, Cole, & Ward, 2010). Some studies have shown more association with Western culture is equated with a lessening buffer effect (Sabik, Cole, & Ward, 2010).

Given these findings, are minority-specific prevention and treatment strategies warranted? There are circumstances that are specific to minorities that should be considered when developing eating disorder treatment programs. Minorities are faced with issues of assimilation and acculturation, and the challenging task of meeting body ideals from multiple cultures. Cultural beliefs, as well as social context invariably affect treatment. Does an individual accept the current “Eurocentric” body ideal, or the body ideal that better represents another culture? Furthermore, what is the meaning of food within the culture? In addition, there are particular etiological factors for the development of an eating disorder that are particularly salient. Researchers have continually stated that SES is a significant risk factor for eating disorders.

Researchers have increasingly recommended the need for tailored interventions for minority groups. A research study conducted by Resnicow, Soler, Braithwaite, Ahluwalia, and Butler (2000), elucidated two intersecting levels to consider when targeting eating disorders in minorities. The superficial level should consider language and content, whereas the deeper level needs to consider sociocultural facets, such as SES, cultural beliefs and traditions, family values, and cultural attitudes surrounding mental health. Thus, treatment programs for minorities could be more efficacious if they explored these facets, addressed internalized oppression, and helped

to resolve cultural and family differences that exist within an individual (Gordon, Castro, Sitnikov, Holm-Denoma, 2010; Kuba, Harris-Wilson, & O'Toole, 2012). Existing strategies of CBT for AN, BN, and BED fail to explicitly examine any of these facets within structured treatment protocol. However, CBT could be used to examine the thoughts a client has related to personal cultural practices, family values, and acculturation status, and how the eating disorder disrupts or maintains these. It is possible that the effectiveness of IPT for BN (Wilson, Grilo, & Vitousek, 2007) stems from an exploration of eating disorder symptoms within a cultural framework where clients are able to examine their intersecting cultural and interpersonal identities and what role the eating disorder plays in mitigating formation discomfort related to identity formation.

Other studies have assessed the efficacy of eating disorder treatment and prevention programs across ethnic groups (i.e., Caucasian, Asian American, and Hispanic women). A study conducted by Rodriguez, Marchand, Ng, and Stice (2008) found that prevention interventions appear to be equally efficacious across various minority groups. However, this study focused on reducing levels of thin-ideal internalization, which were equal at pretest for this study. This may suggest similar acculturation levels for the participants in this study rather equal eating disorder symptom reduction across all minority groups. Another study conducted by le Grange, Telch, and Agras (1997) further supported similar eating disorder symptomatology across minority groups.

Research continues to explore outcomes for tailored interventions for the treatment of eating disorders in minority populations. Some researchers state that the answer lies in the matter of SES and BMI (Cook-Cottone, Jones, & Haugli, 2010). They state when controlling for these two factors, treatment outcomes are similar across minority groups. Thus, SES and BMI may be

among the variables that have the strongest impact on the efficacy of treatment. If this is true, Franko et al. (2012) suggest implementing treatment in areas that are more likely to be utilized by minorities. Franko and colleagues suggest that leaders at community centers and churches become well-versed in the identification and treatment of eating disorders. Cheung and Snowden (1990) state that using community leaders would increase treatment seeking in Asian American, African American, Mexican American and other Latino populations (McMiller & Weisz, 1996). In sum, developing outreach programs within communities, e.g., among church leaders, teachers, and coaches who have the most direct contact with individuals from minority groups may be a helpful avenue for preventing and treating eating disorders (Stein et al., 2001).

Conclusion

Treatment of an AN can be an arduous and frustrating process. However, treatment of BN and BED have treatment success rates that are far more efficacious than those of AN. Research has found that earlier detection of eating disorders is vital for more effective treatment. Because of this, the reclassification of eating disorders in the *DSM-5* allows for intervention at lower levels of pathology (Bravender et al., 2010). Due to cultural differences of ideal body size, acculturation and assimilation factors, family and cultural attitudes towards eating disorders and mental health treatment, and socioeconomic factors, it is imperative that researchers continue to investigate specific treatment recommendations for minority groups.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- American Psychological Association. (2005). *Report of the 2005 Presidential Task Force on Evidence-Based Practice*. APA: Author. Retrieved from <http://www.apa.org/practice/resources/evidence/evidence-based-report.pdf>
- Agras, W. S., Brandt, H. A., Bulik, C. M., Dolan-Sewell, R., Fairburn, C. G., Halmi, K. A., . . . Wilfley, D. E. (2004). Report of the National Institutes of Health Workshop on Overcoming Barriers to Treatment Research in Anorexia Nervosa. *International Journal of Eating Disorders*, 35, 509–521. doi:10.1002/eat.10261
- Anthony, T. M., & Yager, J. (2007). Cultural considerations in eating disorders. In J. Yager and P. S. Powers (Eds.), *Clinical Manual of Eating Disorders* (pp. 387-405). Arlington, VA: American Psychiatric Publishing. doi:10.1080/10640260801887337
- Attia, E., Haiman, C., Walsh, B. T., & Flater, S. R. (1998). Does fluoxetine augment the inpatient treatment of anorexia nervosa? *American Journal of Psychiatry*, 155, 548-551. Retrieved from <http://www.ajp.psychiatryonline.org/>
- Becker, A. E., Arrindell, A. H., 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, 633-647. doi:10.1002/eat.20755
- Becker, A. E., Franko, D. L., Speck, A., & Herzog, D. B. (2002). Ethnicity and differential access to care for eating disorder symptoms. *International Journal of Eating Disorders*, 33, 205-212. doi:10.1002/eat.10129

- Bissada, H., Tasca, G. A., Barber, A. M., & Bradwejn, J. (2008). Olanzapine in the treatment of low body weight and obsessive thinking in women with anorexia nervosa: A randomized, double-blind, placebo-controlled trial. *American Journal of Psychiatry, 10*, 1281-1288. doi:10.1176/appi.ajp.2008.07121900
- Bodell, L. P., Joiner, T. E., & Ialongo, N. S. (2012). Longitudinal association between childhood impulsivity and bulimic symptoms in African American adolescent girls. *Journal of Consulting and Clinical Psychology, 80*, 313-316. doi:10.1037/a0027093
- Bravender, T., Bryant-Waugh, R., Herzog, D., Katzman, D., Kriepe, R. D., Lask, B., . . . Zucker, N. (2010). Classification of eating disturbances in children and adolescents: Proposed changes for the DSM-V. *European Eating Disorders Review, 18*, 79-89. doi:10.1002/erv.994
- Brockmeyer, T., Holtforth, M. G., Bents, H., Kammerer, A., Herzog, W., & Friederich, H. (2013). The thinner the better: Self-esteem and low body weight in anorexia nervosa. *Clinical Psychology and Psychotherapy, 20*, 394-400. doi:10.1002/cpp.1771
- Brown, M., Cachelin, F. M., & Dohm, F. (2009). Eating disorders in ethnic minority women: A review of the emerging literature. *Current Psychiatry Reviews, 5*, 182-193. doi:10.2174/157340009788971119
- Byrne, S. M., Fursland, A., Allen, K. L., & Hunna, W. (2011). The effectiveness of enhanced cognitive behavioural therapy for eating disorders: An open trial. *Behaviour Research and Therapy, 49*, 219-226. doi:10.1016/j.brat.2011.01.006
- Cachelin, F. M., Rebeck, R., Veisel, C., & Striegel-Moore, R. H. (2001). Barriers to treatment for eating disorders among ethnically diverse women. *International Journal of Eating Disorders, 30*, 269-278. doi:10.1002/eat.1084

- Calado, M., Lameiras, M., Sepulveda, A. R., Rodriguez, Y., & Carrera, M. V. (2011). The association between exposure to mass media and body dissatisfaction among Spanish adolescents. *Women's Health Issues, 21*(5), 390-399. doi:10.1016/j.whi.2011.02.013
- Chen, A., Mond, J. M., & Kumar, R. (2010). Eating disorders mental health literacy in Singapore: Beliefs of young adult women concerning treatment and outcome of bulimia nervosa. *Early Intervention in Psychiatry, 4*, 39-46.
doi:10.1111/j.1751-7893.2009.00156.x
- Chui, W., Safer, D. L., Bryson, S. W., Agras, W. S., & Wilson, G. T. (2007). A comparison of ethnic groups in the treatment of bulimia nervosa. *Eating Behaviors, 8*, 485-491.
doi:10.1016/j.eatbeh.2007.01.005
- Combs, J.L., Smith, G.T., Flory, K., Simmons, J.R., & Hill, K.K. (2010). The acquired preparedness model of risk for bulimic symptom development. *Psychology of Addictive Behaviors, 24*(3), 475-486. doi:10.1037/a0018257
- Constantino, M. J., Arnow, B. A., Blasey, C., & Agras, W. S. (2005). The association between patient characteristics and the therapeutic alliance in cognitive-behavioral therapy for bulimia nervosa. *Journal of Consulting and Clinical Psychology, 73*, 203-211.
doi:10.1037/0022-006x.73.2.203
- Cook-Cottone, C., Jones, L, A., & Haugli, S. (2010). Prevention of eating disorders among minority youth: A matched-sample repeated measures study. *Eating Disorders, 18*, 361-376. doi:10.1080/10640266.2010.511894
- Cooper, Z. & Fairburn, C. G. (2011). The evolution of “enhanced” cognitive behavior therapy for eating disorders: Learning from treatment nonresponse. *Cognitive and Behavioral Practice, 18*, 394-402. doi:10.1016/j.cbpra.2010.07.007

- Crago, M., Shisslak, C. M., & Estes, L. S. (1996). Eating disturbances among American minority groups: A review. *International Journal of Eating Disorders, 19*, 239-248.
doi:10.1002/(sici)1098-108x(199604)19:3<239::aid-eat2>3.3.co;2-2
- DeLeel, M. L., Hughes, T. L., Miller, J. A., Hipwell, A., & Theodore, L. A. (2009). Prevalence of eating disturbance and body image dissatisfaction in young girls: An examination of the variance across racial and socioeconomic groups. *Psychology in the Schools, 46*, 767-775. doi:10.1002/pits.20415
- Erguner-Tekinalp, B., & Gillespie, C. W. (2010). Mental health practitioners' professional opinions of etiology of eating disorders. *International Journal of Mental Health, 39*(3), 68-87. doi:10.2753/imh0020-7411390305
- Forcano, L., Santamaria, J. J., Aguera, A., Gunnard, K., Tchanturia, K., Krug, I., . . . Fernandez-Aranda, F. (2008). Eating symptomatology and personality in first-generation American immigrants versus Spanish native-born bulimia nervosa patients. *International Journal of Child and Adolescent Health, 1*, 365-372. Retrieved from <https://www.novapublishers.com>
- Franko, D. L., Thompson, D. R., Forbush, K. T., Bryson, S. W., Crow, S. J., Gorin, A. A., . . . Wilson, G. T. (2012). Racial/ethnic differences in adults in randomized clinical trials of binge eating disorder. *Journal of Consulting and Clinical Psychology, 80*, 186-195.
doi:10.1037/a0026700
- Gentile, K., Raghavan, C., Rajah, V., & Gates, K. (2007). It doesn't happen here: Eating disorders in an ethnically diverse sample of economically disadvantaged, urban college students. *Eating Disorders, 15*, 405-425. doi:10.1080/10640260701667904

- Gordon, K. H., Castro, Y., Sitnikov, L., & Holm-Denoma, J. M. (2010). Cultural body shape ideals and eating disorder symptoms among White, Latina, and Black college women. *Cultural Diversity and Ethnic Minority Psychology, 16*, 135-143. doi:10.1037/a0018671
- Gordon, K. H., Perez, M., Joiner Jr., T. E. (2002). The impact of racial stereotypes on eating disorder recognition. *International Journal of Eating Disorders, 32*, 219-224. doi:10.1002/eat.10070
- Goodwin, H., Haycraft, E. & Meyer, C. (2011). Sociocultural correlates of compulsive exercise: Is the environment important in fostering a compulsivity towards exercise among adolescents? *Body Image, 8*, 390-395. doi:10.1016/j.bodyim.2011.05.006
- Graber, J.A., Brooks-Gunn, J., Paikoff, L., & Warren, M.P. (1994). Prediction of eating problems: An 8-year longitudinal study of adolescent girls. *Developmental Psychology, 30*(6), 823-834. doi:10.1037/0012-1649.30.6.823
- Grilo, C. M., Masheb, R. M., & Wilson, G. T. (2005). Efficacy of cognitive behavioral therapy and fluoxetine for the treatment of binge eating disorder: A randomized double-blind placebo-controlled comparison. *Biological Psychiatry, 57*, 301-309. doi:10.1016/j.biopsych.2004.11.002
- Kaye, W. (2008). Neurobiology of anorexia and bulimia nervosa. *Physiology and Behavior, 94*, 121-135. doi:10.1016/j.physbeh.2007.11.037
- Kipman, A., Gorwood, P., Mouren-Simeoni, M. C., & Ades, J. (1999). Genetic factors in anorexia nervosa. *European Psychiatry, 14*, 189-198. doi:10.1016/s0924-9338(99)80741-x
- Kortegaard, L.S., Hoerder, K., Joergensen, J., Gillberg, C., & Kyvik, K.O. (2001). A preliminary population-based twin study of self-reported eating disorder. *Psychological Medicine: A*

Journal of Research in Psychiatry and the Allied Sciences, 31, 361-365.

doi:10.1017/s0033291701003087

Kuba, S. A., Harris-Wilson, D. J., & O'Toole, S. K. (2012). Understanding the role of gender and ethnic oppression when treating Mexican American women for eating disorders.

Women and Therapy, 35, 19-30. doi:10.1080/02703149.2012.634715

le Grange, D., Telch, C. F., Agras, W. S. (1997). Eating and general psychopathology in a sample of Caucasian and ethnic minority subjects. *International Journal of Eating Disorders*, 21, 285-293.

doi:10.1002/(sici)1098-108x(199704)21:3<285::aid-eat9>3.3.co;2-a

Lock, J., le Grange, D., Agras, S., Bryson, S., Moaye, A., & Booil, J. (2010). Randomized clinical trial comparing family-based treatment to adolescent focused individual therapy for adolescents with anorexia nervosa. *Archives of General Psychiatry*, 67, 1025-1032.

doi:10.1001/archgenpsychiatry.2010.128

Marques, L., Alegria, M., Becker, A. E., Chen, C., Fang, A., Chosak, A., & Diniz, J. B. (2011). Comparative prevalence, correlates of impairment, and service utilization for eating disorders across U.S. ethnic groups: Implications for reducing ethnic disparities in health care access for eating disorders. *International Journal of Eating Disorders*, 44, 412-420.

doi:10.1002/eat.20787

Measelle, J. R., Stice, E., & Hogansen, J. M. (2006). Developmental trajectories of co-occurring depressive, eating, antisocial, and substance abuse problems in female adolescents.

Journal of Abnormal Psychology, 115, 524-538. doi:10.1037/0021-843x.115.3.524

McMillan, W., Stice, E., & Rohde, P. (2011). High- and low-level dissonance-based eating disorder prevention programs with young women with body image concerns: An

experimental trial. *Journal of Consulting and Clinical Psychology*, 79, 129-134.

doi:10.1037/a0022143

McMiller, W. P., & Weisz, J. R. (1996). Help-seeking preceding mental health clinic intake among African-American, Latino, and Caucasian youth. *Journal of American Academy of Child and Adolescent Psychiatry*, 35, 1086-1094.

doi:10.1097/00004583-199608000-00020

National Institute for Clinical Excellence. (2004). *Eating disorders—Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders* (Clinical Guideline No. 9). London: Author. Retrieved from

www.nice.org.uk/guidance/CG9

Olvera, N., Dempsey, A., Gonzalez, E., & Abrahamson, C. (2013). Weight-related teasing, emotional eating, and weight control behaviors in Hispanic and African American girls. *Eating Behaviors*, 14, 513-517. doi:10.1016/j.eatbeh.2013.06.012

Owens, T. E., Allen, M. D., & Spangler, D. L. (2010). An fMRI study of self-reflection about body image: Sex differences. *Personality and Individual Differences*, 48(7), 849-854.

doi:10.1016/j.paid.2010.02.012

Paxton, S. J., Eisenberg, M. E., & Neumark-Sztainer, D. (2006). Prospective predictors of body dissatisfaction in adolescent girls and boys: A five-year longitudinal study.

Developmental Psychology, 42, 888-899. doi:10.1037/0012-1649.42.5.888

Racine, S. E., Burt, S. A., Iacono, W. G., McGue, M., & Klump, K. L. (2011). Dietary restraint moderates genetic risk for binge eating. *Journal of Abnormal Psychology*, 120, 119-128.

doi:10.1037/a0020895

- Resnicow, K., Soler, R., Braithwaite, R. L., Ahluwalia, J. S., & Butler, J. (2000). Cultural sensitivity in substance use prevention. *Journal of Community Psychology, 28*, 271-290. doi:10.1002/(sici)1520-6629(200005)28:3<271::aid-jcop4>3.0.co;2-i
- Rodriguez, R., Marchand, E., Ng, J., & Stice, E. (2008). Effects of a cognitive dissonance-based eating disorder prevention program are similar for Asian American, Hispanic, and White participants. *International Journal of Eating Disorders, 41*, 618-625. doi:10.1002/eat.20532
- Russell, G. F. M., Szmukler, G. I., Dare, C., & Eisler, I. (1987). An evaluation of family therapy in anorexia nervosa and bulimia nervosa. *Archives of General Psychiatry, 44*, 1047-1056. doi:10.1001/archpsyc.1987.01800240021004
- Sabik, N. J., Cole, E. R., & Ward, L. M. (2010). Are all minority women equally buffered from negative body image? Intra-ethnic moderators of the buffering hypothesis. *Psychology of Women Quarterly, 34*, 139-151. doi:10.1111/j.1471-6402.2010.01557.x
- Shaw, H., Ramirez, L., Trost, A., Randall, P., & Stice, E. (2004). Body image and eating disturbances across ethnic groups: More similarities than differences. *Psychology of Addictive Behaviors, 18*, 12-18. doi:10.1037/0893-164x.18.1.12
- Shea, M., Cachelin, F., Uribe, L., Striegel, R. H., Thompson, D., & Wilson, G. T. (2012). Cultural adaptation of a cognitive behavior therapy guided self-help program for Mexican American women with binge eating disorders. *Journal of Counseling and Development, 90*, 308-318. doi:10.1002/j.1556-6676.2012.00039.x
- Silber, T. J. (1986). Anorexia nervosa in Blacks and Hispanics. *International Journal of Eating Disorders, 5*, 121-128. doi:10.1002/1098-108x(198601)5:1<121::aid-eat2260050111>3.0.co;2-9

- Smith, A., Cook-Cottone, C. (2011). A review of family therapy as an effective intervention for anorexia nervosa in adolescents. *Journal of Clinical Psychology in Medical Settings, 18*, 323-334. doi:10.1007/s10880-011-9262-3
- Smith, D. E. (1995). Binge eating in ethnic minority groups. *Addictive Behaviors, 20*, 695-703. doi:10.1016/0306-4603(95)00093-3
- Steiger, H. (2004). Eating disorders and the serotonin connection: state, trait and developmental effects. *Journal of Psychiatry and Neuroscience, 29*, 20-29. Retrieved from jpn.ca
- Stein, R. I., Saelens, B. E., Dounchis, J. Z., Lewczyk, C. M., Swenson, A. K., & Wilfley, D. E. (2001). Treatment of eating disorders in women. *The Counseling Psychologist, 29*, 695-732. doi:10.1177/0011000001295004
- Stice, E., Becker, C. B., & Yokum, S. (2013). Eating disorder prevention: Current evidence-base and future directions. *International Journal of Eating Disorders, 46*, 478-485. doi:10.1002/eat.22105
- Stice, E., Marti, C. N., & Rohde, P. (2013). Prevalence, incidence, impairment, and course of the proposed DSM-5 eating disorder diagnoses in an 8-year prospective community study of young women. *Journal of Abnormal Psychology, 122*, 445-457. doi:10.1037/a0030679
- Stice, E., Presnell, K., Shaw, H., & Rohde, P. (2005). Psychological and behavioral risk factors for obesity onset in adolescent girls: A prospective study. *Journal of Consulting and Clinical Psychology, 73*, 195-202. doi:10.1037/0022-006x.73.2.195
- Stice, E., & Whitenton, K. (2002). Risk factors for body dissatisfaction in adolescent girls: A longitudinal investigation. *Developmental Psychology, 38*, 669-678. doi:10.1037/0012-1649.38.5.669

- Striegel-Moore, R. H., Dohm, F. A., Kraemer, H. C., Taylor, C. B., Daniels, S., Crawford, P. B., & Schreiber, G. B. (2003). Eating disorders in White and Black women. *American Journal of Psychiatry, 160*, 1326-1331. doi:10.1176/appi.ajp.160.7.1326
- Striegel-Moore, R. H., & Cachelin, F. M. (2001). Etiology of eating disorders in women. *The Counseling Psychologist, 29*, 635-661. doi:10.1177/0011000001295002
- Swanson, S. A., Crow, S. J., Le Grange, D., Swendsen, J., & Merikangas, K. R. (2011). Prevalence and correlates of eating disorders in adolescents: Results from the national comorbidity survey replication adolescent supplement. *Archives of General Psychiatry, 68*(7), 714-723. doi:10.1001/archgenpsychiatry.2011.22
- 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*, S10-14. doi:10.1002/eat.20451
- Thompson-Brenner, H., Thompson, D. R., Boisseau, C. L., Richards, L. K., Bulik, C. M., Devlin, M. J., . . . Wilson, G. T. (2013). Race/ethnicity, education, and treatment parameters as moderators and predictors of outcome in binge eating disorder. *Journal of Consulting and Clinical Psychology, 81*, 710-721. doi:10.1037/a0032946
- Toro, J., Gomez-Peresmitre, G., Sentis, J., Valles, A., Casula, V., Castro, J., . . . Rodriguez, R. (2006). Eating disorders and body image in Spanish and Mexican female adolescents. *Social Psychiatry and Psychiatric Epidemiology, 41*, 556-565. doi:10.1007/s00127-006-0067-x
- Wilfley, D. E., Welch, R. R., Stein, R. I., Spurrell, E. B., Cohen, L.R., Saelens, B. E., . . . Matt, G. E. (2002). A randomized comparison of group cognitive-behavioral therapy and group

interpersonal psychotherapy for the treatment of overweight individuals with binge eating disorder. *Archives of General Psychiatry*, 59, 713-721. doi:10.1001/archpsyc.59.8.713

Wilksch, S. M., & Wade, T. D. (2010). Risk factors for clinically significant importance of shape and weight in adolescent girls. *Journal of Abnormal Psychology*, 119, 206-215. doi:10.1037/a0017779

Wilson, G. T., Grilo, C. M., & Vitousek, K. M. Psychological treatment of eating disorders. *American Psychologist*, 62, 199-216. doi:10.1037/0003-066x.62.3.199