

THE IMPACT OF CLIENT WEIGHT AND ETHNICITY ON COUNSELORS'
EVALUATION OF EATING DISORDERS SYMPTOMS:
A VIGNETTE STUDY

A DISSERTATION
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY

DEPARTMENT OF PSYCHOLOGY AND PHILOSOPHY
COLLEGE OF ARTS AND SCIENCES

BY
MOLLY MCASHAN, M.A.

DENTON, TX

MAY 2018

ACKNOWLEDGMENTS

I would like to thank Drs. Sally D. Stabb, Shannon Scott, and Lisa Rosen for their willingness to participate on my dissertation committee. I would especially like to acknowledge my dissertation chair, Dr. Stabb, for her patience, guidance, and unwavering support throughout my dissertation process. In addition, I would like to extend a more general thanks to her as director of training, supervisor, and mentor to me over the course of my graduate training experience. Thanks to Dr. Scott for always making time to support my research and provide reliably helpful guidance both on my thesis and dissertation. Thanks to Dr. Rosen for providing me with a thorough understanding of statistics necessary for me to complete this project, and for being a warm and supportive professional role model throughout my graduate training.

In addition, I would like to extend my gratitude to the licensed professional counselors who participated in this study. Thank you for taking the time to make this dissertation possible. I would also like to thank the friends and family members who have provided steady support for the past five years as I navigated the difficult path of my doctoral program. In particular, thank you to my husband, Benjamin Jones, whose encouragement, support, and love made it possible for me to pursue and achieve this dream. Finally, I give special thanks to my parents for not only educating me, but also encouraging me and enabling me to seek life long enrichment and higher education.

ABSTRACT

MOLLY MCASHAN

THE IMPACT OF CLIENT WEIGHT AND ETHNICITY ON COUNSELORS' EVALUATION OF EATING DISORDERS SYMPTOMS: A VIGNETTE STUDY

MAY 2018

The purpose of this study was to examine the potential impact of client weight and ethnicity on counselors' recognition and appraisal of eating disorder symptoms. Previous research has demonstrated weight-based bias in healthcare practitioners, including individual therapists. In addition, previous research has illustrated that racial and ethnic stereotypes may contribute to misdiagnosis/underdiagnosis of disordered eating in women of color. This study randomly assigned participants to one of six different vignette conditions. The vignettes varied only by the weight (low, high) and ethnicity (White, Black, Hispanic) of the client they describe. All vignettes featured a young woman who engages in restrictive eating behaviors and over-exercising, and who has lost 25% of her body weight over a short period of time. Participants were asked to label and rate the severity of her presenting problem, as well as rate the frequency and severity of the client's symptoms. It was hypothesized that participants would rate the client's eating disordered behaviors as less severe when the client is not significantly underweight, despite the presence of drastic, medically unsafe weight loss. Demographic information of participants was collected in order to identify any potential relationship between demographic factors and patterns of decision-making. Results indicated that the

weight of the client in the vignette appeared to influence participants' clinical evaluation of the client. Participants were more likely to recommend a medical follow-up when the client was lower weight. Participants' responses on an anorexia symptom subscale indicated that they rated the behaviors as more frequent in the lower weight condition, and their rating of the overall severity of her presenting problem was higher in the lower weight condition. No differences were observed based on race, or on interaction of race and weight. Implications for theory, research, and practice are discussed.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
ABSTRACT.....	iii
LIST OF TABLES	viii
 Chapter	
I. INTRODUCTION	1
Statement of Problem.....	1
Rationale for Study	3
Statement of Purpose	4
II. LITERATURE REVIEW	6
Obesity.....	6
Prevalence	6
Health Impacts	7
Psychosocial Impacts	8
Weight-based Stigma	8
Stigma Defined	8
Prevalence and Effects of Weight-Based Stigma	10
Self-Stigma	15
Size Bias in the Helping Professions	16
Obesity Issues Specific to U.S. African American and Hispanic Women	20
Eating Disorders.....	24
Statistics	24
Health Impacts	27
Psychosocial Impacts	28
Eating Disorder Stigma.....	30
Self-Stigma	32
Eating Disorder Stigma Among Providers	34
Eating Disorders in Women of Color	36
Relationship Between Eating Disorders and Obesity	40
Conceptual Issues in Diagnosis	41

Restrictive Eating in Obese and Overweight Women	42
Applied Concerns in Clinician's Competency.....	48
Training.....	48
Combatting Negative Bias in Mental Health Professionals.....	49
Gaps in the Literature.....	51
Rationale for the Proposed Investigation.....	52
Research Questions	53
III. METHOD	54
Overview	54
Participants	54
Instrumentation	54
Vignettes	54
Clinical Survey.....	56
Demographics	57
Procedure	58
Analysis Plan	59
Descriptive Statistics.....	59
Hypotheses and Analyses	60
IV. RESULTS	63
Preliminary Analyses	63
Analyses of Major Hypotheses	68
Hypothesis One.....	68
Hypothesis Two	69
Hypothesis Three	70
Hypothesis Four.....	71
Hypothesis Five	72
Hypothesis Six	73
V. DISCUSSION	76
Summary of Major Findings.....	76
Integration of Findings with Literature.....	78
Implications for Training	84
Implications for Practice	86
Strengths of Study.....	89
Limitations of Study	90
Future Research	92
Conclusion	94

REFERENCES	97
APPENDICES	133
A. Vignette	133
B. Clinical Impressions.....	136
C. Demographics	140
D. Recruitment Letter	142
E. Informed Consent.....	144
F. Debriefing	147
G. Referral	149
H. IRB Approval Letter	151

LIST OF TABLES

Table	Page
1. Correlations for Continuous Variables	65
2. Frequencies for Categorical Demographic Variables	66
3. Descriptive Statistics for Continuous Demographic Variables	67
4. Participants by Stimulus Category	67
5. Likelihood of Diagnosing by Weight Condition	69
6. Medical Recommendation by Weight Condition	71
7. 2 x 3 ANOVA of Severity Rating Scores by Stimulus Condition	72
8. Means and Standard Deviations for Severity Rating Scores	72
9. 2 x 3 ANOVA of Anorexia Subscale Mean Scores by Stimulus	73
10. Means and Standard Deviations for Anorexia Subscale Mean Score by Stimulus	73
11. Comparison of Anorexia and Bulimia Subscale Means by Weight Stimulus	74

CHAPTER I

INTRODUCTION

Statement of Problem

It is highly likely that, at some point, counselors working in outpatient practices will encounter clients who are overweight or obese. Approximately 34.9% of adults and 17% of children in the United States are obese; approximately 68.5% of adults and 31.8% of children qualify as either overweight or obese (Ogden, Carroll, Kit, & Flegal, 2014). As such, it is of particular interest to evaluate any weight-based biases that may influence individual counselors working with overweight and obese clients in clinical settings. A common experience for both children and adults who are overweight or obese is exposure to weight-based stigma. Weight-based stigma may influence overweight and obese individuals in a variety of areas, including employment (Marlowe, Schneider, & Nelson, 1996; O'Brien, Latner, Ebner, & Hunter, 2013; Roehling, 1999), education (MacCann & Roberts, 2013; Puhl & Heuer, 2009), and healthcare (Foster, et al., 2003; Puhl, Luedicke, & Grillo, 2014). Common stereotypes associated with overweight and obese individuals include laziness, loneliness, lack of education, and even illegal and immoral activity (Greenberg, Eastin, Hofschire, Lachlan, & Brownell, 2003; Schvey, Puhl, Levandoski, & Brownell, 2013). Negative bias has been observed by students in health-related disciplines (Puhl, Luedicke, & Grilo, 2014). Practitioners may consider overweight clients to be more “difficult” and have poorer prognoses. Furthermore, mental health practitioners are more likely to attribute depressive features, low self-

esteem, and sexual dissatisfaction to clients based solely on weight status (Pascal & Kurpius, 2012).

Eating disorders are associated with a wide variety of possible medical complications (American Psychiatric Association, 2010; Li Cavoli, Mule, & Rotolo, 2011; Rome & Ammerman, 2003). This elevated medical risk can make individuals with eating disorders challenging for individual therapists to work with in their outpatient, community, or private practices. Stigma associated with eating disorders includes the belief that clients with eating disorders are self-centered, self-indulgent, vain, and are actively choosing their illness (Ebnetter, Latiner, & O'Brien, 2011). From a treatment perspective, eating disorder symptoms may not be adequately assessed if a client is in a normal weight range (Butryn, Juarascio, & Lowe, 2011). Furthermore, assumptions are commonly made about client behavior based on client weight, such as assuming that underweight individuals with anorexia nervosa do not engage in binge eating behavior or assuming overweight clients engage in binge eating behavior strictly based on their weight (Bannon, Hunter-Reel, Wilson, & Karlin, 2009; Elran-Barak, et al., 2015).

Racial and ethnic background is also a source of bias in terms of eating disorder evaluation and treatment. Although research findings have been mixed regarding rates of eating disorders by ethnicity, eating disorders have been observed across ethnic groups (Cachelin, Striegel-Moore, & Elder, 1998; Cachelin, Veisel, Striegel-Moore, & Barzegarnazari, 2000; Lester & Petrie, 1998; Moskowitz & Weiselberg, 2017). While social factors such as access to treatment, access to health insurance, recognition of

symptoms, and community norms may influence whether or not women of color enter treatment (Becker, Arrindell, Perloe, Fay, & Striegel-Moore, 2010; Cachelin, Rebek, Veisel, & Striegel-Moore, 2001), there also exists the potential for bias on the parts of assessing clinicians who assume screening for eating disorder symptoms is unnecessary due to client ethnicity (Becker, Franko, Speck, & Herzog, 2003). In this way, both body size and ethnicity have the potential to influence counselors' first impressions and tint the way they evaluate reported eating disorder symptoms.

Rationale for Study

An increasing number of adolescent and young adult patients within a normal weight range are receiving inpatient treatment for eating disorder related to rapid weight loss (Whitelaw, Gilbertson, Lee, & Sawyer, 2014). A significant number of adolescent patients presenting for inpatient eating disorder treatment were once obese and lost weight rapidly as a result of their eating disorder behaviors; furthermore, these patients may be more difficult to treat and may have longer recovery periods (Lebow, Sim, & Kransdorf, 2015). Negative assumptions made about overweight and obese individuals, coupled with glorification of the thin ideal, could potentially influence people to misinterpret unhealthy weight loss due to an eating disorder as insignificant or even as a positive event. If this influence applies not just to the general population but to counselors working with clients, it has the potential to obfuscate counselors' clinical judgment in a way that could be dangerous. It would be ideal to identify clients who present with potentially dangerous restrictive eating behaviors before they are in need of an inpatient level of care.

No previous research has been conducted specifically on the area of weight-based bias in eating disorder symptom evaluation. Furthermore, there appears to be a relative dearth in the literature about atypical anorexia nervosa and restrictive behaviors in overweight and normal weight women, leading this author to question if a segment of the eating disorder population that could benefit from research is going relatively unnoticed. Furthermore, while previous research has examined inaccurate evaluation of eating disorder symptoms based on ethnicity (Becker et al., 2003; Gordon, Brattole, Wingate, & Joiner, 2006), no previous studies have examined the possible ways in which ethnicity and weight may interact to influence evaluation of eating disorder symptoms. Major risk factors of the development of an eating disorder are body dissatisfaction, drive for thinness, dietary restraint, and internalization of a thin ideal (Rohde, Stice, & Marti, 2015; Stice, Ng, & Shaw, 2010). Yet, due to weight-based assumptions, mental health practitioners may not assess for any of these factors, or may even assume they are a non-issue, based purely on the physical presentation of the client. Due to the medical risks associated with rapid weight loss secondary to pathological eating restriction (Rome & Ammerman, 2003; Whitelaw et al., 2014), it is important for mental health practitioners in private practice to take seriously any rapid weight loss reported by a new client and to assess further for possible eating disorder symptoms.

Statement of Purpose

The purpose of this study was to examine possible biases based on weight stigma and ethnic stereotyping that may influence counselors' ability to recognize the presence of and accurately rate the severity of eating disorder symptoms. Given the medical risks

involved with eating disorders and the importance of early detection to the recovery process, it is important to identify any potential barriers to competent care. If counselors are able to identify eating disorder symptomology outside of the stereotypical presentation, more clients will, in theory, be more likely to benefit from detection at the outpatient level, ideally before inpatient hospitalization is necessary. Furthermore, this study integrated factors that may influence clinical judgment, such as gender (Young & Powell, 1985), years of experience and age (Davis-Coelho, Waltz, & Davis-Coelho, 2000). Information garnered about length of experience and type of training program may provide valuable information in terms of creating possible interventions for more thorough eating disorder training initiatives

CHAPTER II

LITERATURE REVIEW

The purpose of this literature review is to present previous research related to weight bias and to explore the potential relationship between weight bias and assessment of eating pathology. The chapter will provide an overview of weight-based stigma and its impacts, including weight-based stigma in the helping professions, explore stigma related to eating pathology, discuss the specific barriers faced by ethnic minority women seeking eating disorder treatment, and provide a brief overview of potential interventions to decrease counselor bias. The literature review is organized by first discussing obesity and its associated impacts and stigma.

Obesity

In the literature, weight classifications are typically based on Body Mass Index (BMI). BMI is calculated by dividing an individual's weight in kilograms by height squared. Obesity is defined as having a BMI of 30 or higher. Being overweight among adults is defined as having a BMI greater than or equal to 25 but less than 30 (World Health Organization, 2015).

Prevalence

Obesity impacts a significant percentage of the U.S. population. Ogden et al. (2014) evaluated height and weight data gathered from 9120 participants who completed the National Health and Nutrition Examination Survey. Ogden et al. (2014) used BMI to

categorize participants' weight status. According to their results, approximately 34.9% of adults and 17% of children in the United States are obese. The percentage of adults who meet the criteria for being either overweight or obese is 68.5% for adults and 31.8% for children. In terms of gender, 66.5% of women are obese or overweight, and 71.6% of men are considered obese or overweight. These results were similar to rates assessed by Ogden and associates (2006) for prevalence between 1999 and 2004.

Health Impacts

Obesity is widely considered a major public health issue and much attention has been paid to the etiological factors that contribute to obesity and possible methods of intervention. Research suggests that certain health complications are more likely to co-occur with or develop from obesity.

Obesity in childhood may increase susceptibility to developing asthma, and may lead to more severe episodes of asthma (Black, Zhou, Takayanagi, Jacobsen, & Koebnick, 2003). In addition, high cholesterol in childhood is associated with obesity and children with obesity are more likely to experience high blood pressure (Kavey, Simmons-Morton, & de Jesus, 2011; Sorof, Lai, Turner, Poffenbarger, & Portman, 2004). In adults, some research has identified a link between severe obesity (BMI greater than 35) and increased mortality rates (Drenick, Bale, Selzer, & Johnson, 1980; Manson, et al., 1995). However, the association between moderate overweight status and mortality is not supported. Health complications associated with obesity include hypertension, type 2 diabetes, stroke, coronary artery disease, congestive heart failure, chronic back pain, asthma, osteoarthritis, and gallbladder disease (Guh et al., 2009). In addition, some

research supports that obesity is inversely correlated with lifespan (Flegal, Williamson, Pamuk, & Rosenberg, 2004). It is important to note that other factors may mediate the effects of obesity on health. As will be discussed in depth later, obese individuals are more likely to receive discrimination based on their weight, and may even avoid attending medical appointments due to their awareness of this stigma. Avoidance of medical appointments may contribute to the development of major health problems due to lack of routine preventative care.

Psychosocial Impacts

In addition to health impacts, weight status may also have a negative impact on psychosocial functioning. Stunkard, Faith, and Allison (2003) identified a positive correlation between depression and obesity in women, and noted that this correlation increased among those of higher SES. Body dissatisfaction appears to relate directly to weight status in young women (Presnell, Bearman, & Stice, 2004; Stice & Whitenton, 2002). Higher rates of body dissatisfaction in young women are associated with low self-esteem, negative affect, and development of eating disorders (Olivardia, Pope, Borowiecki, & Cohane, 2004; Stice, 2002).

Weight-Based Stigma

Stigma defined. Goffman (1963) defined stigma as an attribute, behavior, or reputation that leads a person to be viewed as socially undesirable. These judgments are often based on observable characteristics, enabling people to make efficient appraisals of social worth. Goffman identified categories of stigma including (1) stigma based on physical characteristics, (2) stigma based on group membership, and (3) stigma based on

perceived character flaws. Goffman's (1963) definition of stigma is congruent with common reactions to "fatness" in United States culture in that it has the capacity to pollute one's social standing and social identity. People who are overweight face stigma related to both physical characteristics and perceived character defects. Elias and Scotson (1994) made the distinction between the term stigmatization and the term stigma; he used stigmatization to refer to attaching inferior worth to a member of a group, while he used stigma to refer to stigmatization that has become widely accepted. Within the context of the current study, the terms weight bias and weight stigma will be used to refer to widely-held negative attitudes and beliefs that are associated with being overweight.

In the U.S, body weight is inextricably tied to social status. Higher weight was once associated with higher status due to the assumption that those who were heavier possessed greater resources; thinness, on the other hand, was associated with lack of resources and, possibly, illness (Stearns, 1997). However, food shortages are no longer as common in the United States, and thinness is now associated with greater resources such as the money for nutritious food and the time, money, and opportunity to exercise regularly (Aronowitz, 2008). Furthermore, as higher weight status became more common and easier to achieve, thinness began to convey personal discipline and drive. In this way, thinness became associated with virtuousness (Stearns, 1997). As overweight people lost their social status, certain negative characteristics traditionally associated with low socioeconomic status (SES) people began to be associated with fatness: lack of cleanliness, lack of discipline, and immorality. Some of the negative stereotypes associated with higher weight status are present in and reinforced by media

representations. Obese and overweight people are underrepresented on television and are often characterized as unattractive, passive, and asexual (Greenberg et al., 2003).

Prevalence and effects of weight-based stigma. The stigma attached to obesity causes significant damage and distress. Despite the substantial number of overweight and obese people in the United States, weight-based discrimination is pervasive. Weight bias is a widespread phenomenon that appears to exist consistently across raters (Latner, O'Brien, Durso, Brinkman, & MacDonald, 2008). Multiple negative characteristics have been associated with obesity, including incompetence, laziness, lack of cleanliness, and lack of will power (Crandall, 1994; Puhl & Brownell, 2001; Teachman, Gapinski, Brownell, Rowling, & Jeyaram, 2003). Bias against people based on weight appears to have the potential to manifest early; Cramer and Steinwert (1998) found that prejudicial treatment towards overweight and obese individuals has the potential to start as early as age three. Furthermore, weight bias has been documented in a variety of settings, including education, work, and healthcare environments (O'Brien, Latner, Ebner, & Hunter, 2013; Puhl & King, 2013). Schvey et al. (2013) examined weight bias among jurors and found that jurors were more likely to evaluate an overweight defendant as guilty of check fraud based on a vignette and mug shot than they were when presented with an average weight defendant. Lynagh, Cliff, and Morgan (2015) found both explicit and implicit anti-fat bias among physical education instructors, specifically. Lynagh, Cliff, and Morgan (2015) found that participants were more likely to rate obese children as more self-conscious and less healthy, and were more likely to associate obese children with negative attributes such as "bad" and "stupid." Similarly, MacCann and Roberts

(2013) found that, in their sample of 383 8th grade students, obese children received lower grades than normal weight peers despite no significant differences between their intelligence or achievement test scores and their peers' intelligence or achievement test scores.

Weight stigma leads to a number of negative psychosocial impacts on overweight and obese individuals. For example, Carr and Friedman (2005) found that obese individuals were significantly more likely to report lower levels of self-acceptance than normal weight individuals. Weight stigma has been associated with increased levels of depression, low self-esteem, and anxiety (Friedman et al., 2005). Weight-based bias often manifests in covert micro-aggressions such as poor eye contact and decreased smiling (King, Shapiro, Hebl, Singletary, & Turner, 2006). A study conducted by Greenleaf, Petrie, and Martin (2014) of 1419 adolescents found an association between weight-based teasing and low psychological well-being as measured by Depression Scale for Children and the self-esteem scale from the Self-Description Questionnaire. In addition to impacting mood, weight-related stigma has the potential to be internalized and projected on to others (Bleich, Gudzone, Bennett, Jarlenski, & Cooper, 2013; Greener, Douglas, & van Teijlingen, 2010). Exposure to and internalization of weight-related stigma may also contribute to weight retention or gain (Brewis, 2014).

A great deal of research conducted on weight-based stigma is based on self-reported data and is therefore focused on explicit bias. Bias against overweight and obese individuals is implicit as well. Bessenoff and Sherman (2000) studied implicit attitudes in a sample of 127 undergraduates. Participants were primed with images of fat

and thin women and were more likely to associate negative fat-stereotypical traits with the image of the fat woman. Furthermore, their implicit attitudes predicted the amount of physical distance they chose to put between themselves and a fat woman. Schwartz, Chambliss, Brownell, Blair, and Billington, (2003) found similar results using the Implicit Association Test (IAT) with a sample of healthcare providers. These studies suggest that weight-based stigma is often deeply rooted and may exist outside of conscious awareness. This lack of awareness has the potential to make it more difficult to recognize how weight bias influences judgment.

Weight stigma may also contribute to obese individuals' avoidance of physical activity (Faith, Leone, Ayers, Moonseong, & Pietrobelli, 2002) and may contribute to weight gain (Myers & Rosen, 1999). Association between weight stigma and physical exercise may develop at a fairly early age. Faith et al. (2002) found that children who were the targets of weight criticism were more likely than their peers to have a negative attitude towards sports and were more likely to avoid physical activity. In this way, weight stigma can create a self-fulfilling prophecy; obese individuals are advised to exercise in order to lose weight, but are fearful of doing so in public due to their weight. Weight stigma may also contribute to obese individuals' avoidance of public health messages about obesity (Lewis et al., 2011).

Weight-based stigma affects individuals in childhood, causing negative effects that carry over into adulthood. Weight-based bullying, teasing, and rejection that occur in adolescence have been connected to low self-esteem and anxiety in adulthood (Robinson, 2006). Obese children have more absences from school and are more likely

to be required to repeat at least one year of school (Halfon, 2015). Smith and Niemi (2003) found that teachers rated overweight female students as having lower levels of intelligence. These results suggest that obese adolescents experience discrimination and harassment that make it more difficult for them to thrive in school, which in turn has the potential to impact their opportunities later in life.

While weight bias is exhibited towards both men and women, it appears to be directed more often towards women (Brownell, 2005; Cecil et al., 2005; Teachman & Brownell, 2001). Weight status and related weight-based stigma have implications for numerous aspects of clients' lives. For example, weight bias influences hiring practices and may act as a deciding factor in hiring decisions (Paul & Townsend, 1995; Roehling, 1999). There is evidence that co-workers and supervisors evaluate overweight employees as being less reliable (Roehling, 1999). Overweight women, specifically, earn less than normal weight female coworkers occupying the same positions, although this pattern of discrimination is not evident for overweight men (Pagan & Davila, 1997). The presence of weight-based stigma in occupational settings is made worse by the fact that there are no current laws protecting employees from weight-based discrimination.

One of the factors that contribute to the bias against overweight and obese people may relate to assessment of physical attractiveness. There is a large body of research that supports the existence of a bias in favor of those who are considered physically attractive. Attractive people are considered to be more intelligent and sociable than overweight individuals (Feingold, 1992), and receive advantages in a variety of situations due to this privilege including employment and education opportunities (Marlowe, Schneider, &

Nelson, 1996). The dominant culture in the United States values a thin ideal as a defining characteristic of attractiveness, and this ideal is evident in television programming, advertising, and print (Wolf, 1991).

Another contributing factor to weight-based stigma may be the just-world fallacy. In many ways, obesity is viewed as a manifestation of personal failure and weight is viewed as a metric of personal discipline and control. Ebner, Latner, and O'Brien (2011) found a significant association between participants' negative views towards obese individuals and their attribution of individual responsibility for the development of obesity. It is possible that just-world beliefs are associated with victim blaming because they create rationalizations for negative attitudes towards others that reduce or eliminate guilt (Crandall & Eshleman, 2003). This may also contribute to the internalized negative views and low self-esteem that is frequently seen among obese individuals. The application of the just-world fallacy leads to blaming overweight and obese people for their status as overweight and obese; this blame is, in turn, used to rationalize negative attitudes related to weight. Promotion of the just-world fallacy fits with the Judeo-Christian values that are present in the dominant culture in the United States. Qualities such as self-denial are promoted; in this respect, Christian women who are overweight may view themselves as having failed (Quinn & Crocker, 1999) and indeed may be judged similarly by others who share these values.

The assumption of personal responsibility in relationship to weight status is reflected in both research and in patterns of media coverage of obesity in the United States. Much of the focus is placed on lifestyle issues such as food choices and activity

level (Candib, 2007; Teachman & Brownell, 2001). People living in industrialized areas of the United States live a more sedentary lifestyle today than they did in previous decades; this lack of activity is considered a risk factor for being overweight or obese (Candib, 2007). Another important factor is SES; low SES women are significantly more likely to be overweight than higher SES women. This disparity may be due to what foods are available at low cost (Cecil et al., 2005). Highly processed foods and “junk” foods tend to be more affordable than unprocessed foods. Indeed, when people focus on obesity as a function of personal lifestyle choices, they are more likely to adopt a negative attitude towards overweight and obese individuals. However, if obesity is viewed as a function of genetic or biological determinants outside of the person’s control, attitudes are less negative (Teachman et al., 2003; Wang, Brownell, & Wadden, 2004).

Self-stigma. Negative stereotypes are often internalized by overweight individuals, leading to self-stigma (Schwartz, Vartanian, Nosek, & Brownell, 2006). Obese people demonstrate lower self-acceptance and often do not embrace their identities as members of a group that is stigmatized based on size (Wang et al., 2004). To an extent, self-stigma is culturally reinforced and normalized; shame and negative self-concept are seen as potential motivating factors for weight loss. However, there is no evidence that self-stigma is associated with improved health or with weight loss. Puhl, Moss-Racusin, and Schwartz (2007) studied the impacts of self-stigma in a sample of 1013 women and found the opposite effect: women who internalized negative weight-based stereotypes were more likely to binge eat and less likely to engage in healthy eating behaviors. Similarly, Hilbert, Braehler, Haeuser, and Zenger (2014) predicted and found greater anxiety and

depression and lower global health status in obese individuals who internalized negative weight-related stereotypes.

Size Bias in the Helping Professions

There is substantial evidence for a pervasive negative weight bias amongst healthcare professionals in the United States, although this level of bias may be lower than that of the general population (Brownell, Puhl, Schwartz, & Rudd, 2005; Puhl & Heuer, 2009; Sabin, Marini, & Nosek, 2012; Teachmann & Brownell, 2001). Given the gradually rising rate of obesity in the United States, and the negative impacts of discrimination, it is imperative that mental health professionals and trainees receive appropriate training regarding weight bias and working with overweight clients. Appropriate training would include exploration of existing negative attitudes and willingness to challenge these attitudes.

Although one would hope that healthcare professionals would be resistant to the negative attitudes associated with weight stigma, research supports the presence of bias in physicians, medical students, and mental health practitioners. Negative bias is observed by students in health-related disciplines (Puhl et al., 2014). Foster et al. (2003) found that more than 50% of the physicians in their sample reported viewing obese patients as non-compliant and described obese patients as “awkward and unattractive” (p. 31). Furthermore, more than 33% of the participants described obese patients as weak-willed and lazy. Wigton and McGaghie (2001) found that medical students were more pessimistic that patients would be able to maintain prescribed lifestyle changes or benefit from counseling if the patients were obese. In addition, they were more likely to rate the

patients as less attractive, less compliant, and more depressed. Similarly, Jay et al. (2009) found that 45% of the physicians they sampled reported having a negative reaction to obese patients. A longitudinal study conducted by Warner et al. (2008) indicated that physicians' negative attitudes towards obese patients increased over the course of seven years. Interestingly, a significant increase over time was noted in the evaluation of obese patients as "sad" and "lazy," and this increase was observed across age groups, with younger physicians being consistently more likely endorse these views. Teachmann and Brownell (2001) attributed weight stigma in professionals to the persistent negative media attention given to the topic of obesity; they proposed that these negative messages influence even specialists who work specifically with overweight people. Overweight and obese patients are aware of the negative attitudes often held by healthcare providers and report healthcare settings as a major source of weight-based stigma (Puhl & Brownell, 2006). Because they have experienced this stigma, overweight and obese patients may be more likely to avoid going to the doctor, which may lead to neglect of routine preventative screenings. For example, Amy, Aalborg, Lyons, and Keranen (2006) found that weight-based stigma was a barrier to seeking cervical cancer screenings in a sample of obese White and African American women.

Bias among health professionals who work with obese and overweight clients appears to be implicit as well as explicit. Schwartz et al. (2003) found that health professionals exhibited significant bias against obese individuals on the implicit association test (IAT). Furthermore, they implicitly attributed negative characteristics to obese individuals, including laziness, lack of intelligence, and worthlessness. These

results suggest that weight-based bias is deeply rooted and may influence practitioner's judgment without their conscious awareness.

Research on weight bias among mental health practitioners, specifically, suggests that bias is present amongst counselors, psychologists, and students in training as well. Results from a survey by Puhl and Brownell (2006) of 2449 overweight and obese women indicated that mental health care environments were rated as less stigmatizing than other treatment environments. Nonetheless, 21% reported experiencing stigma from a mental health practitioner at least once. Judgments formed by psychotherapists will inevitably impact diagnosis and course of treatment. Client appearance has tremendous implications for judgments formed by mental health professionals who are meeting with a client for the first time. There is evidence that weight plays a factor in how mental health professionals rate the severity of psychological symptoms. Young and Powell (1985) found that mental health professionals made significantly higher ratings of psychological dysfunction when presented with the case study of a female client who was 20% or 40% over ideal body weight compared to an ideal weight client, despite other information in the case study being identical. Similarly, in her dissertation, Amici (2003) asked a sample of 163 mental health professionals to evaluate a case study and provide a diagnosis. Those presented with an accompanying picture of an overweight woman were more likely to assign pathology than those who received a picture of an average weight woman. Puhl et al. (2013) found that 55% of the 329 professionals they sampled believed that their obese clients overeat, 50% believed they were insecure, 38% believed they were inactive, and 15% believed they were indulgent. However, 94% also stated

that their obese clients deserved respectful treatment, and 84% stated that they felt prepared to work with them. Based on these results, it is clear that the sampled professionals made assumptions about both behavior and character traits based solely on weight status. It is worth noting that the majority of these participants exhibited confidence that they were competent despite self-reported negative bias towards obese clients.

In addition, there is evidence that counseling graduate students who have not yet entered professional practice endorse weight bias. Pascal and Kurpius (2012) used case vignettes, varying only weight status and job status. Those who read the vignette about a 235-pound woman rated her with more negative characteristics than those who read the vignette about the 135-pound woman. These characteristics included unattractiveness, low self-esteem, and inactivity. Given the likelihood that trainees will eventually work with overweight and obese clients in professional practice, it is concerning that they would demonstrate such clear negative bias based solely on weight.

Although there is a high probability that professional psychologists in clinical practice will work with overweight or obese clients at some point, there is a dearth of training in graduate programs aimed at awareness and prevention of fat bias. An essential part of competent practice for counselors requires awareness of personal biases (Sue & Sue, 2008). Without specific attention paid to size as a diversity factor, internalized weight bias may not even register within counselors' conscious awareness. Or, more concerning still, the issue of weight bias may not be considered a relevant or legitimate diversity factor by counselors who are not exposed to the issue as part of

diversity training. Davis-Coelho et al. (2000) found that younger and less experienced psychologists were more likely to exhibit greater bias against fat clients when presented with a case study. Specifically, they appraised overweight clients as contributing less effort in counseling sessions than average weight counterparts. Furthermore, they assigned overweight clients a lower Global Assessment of Functioning (GAF) score. Interestingly, the sample psychologists were also more likely to attribute low sexual satisfaction to overweight clients, although the issue of sexual satisfaction was not introduced to them in the case study provided. These results suggest that the sampled psychologists may have been projecting negative stereotypes onto a client they had not met simply based on appearance alone.

Obesity Issues Specific to African American and Hispanic Women

Non-Hispanic Black women and Mexican American women demonstrate higher obesity rates than their non-Hispanic White female counterparts (Flegal, Carroll, Ogden, & Curtin, 2010). Harris, Perreira, and Lee (2009) found that Hispanic and Black women reported a greater increase in BMI between adolescence and young adulthood than their White non-Hispanic counterparts. Obesity is less stigmatized in the United States by African American women than it is by White women (Hebl & Hatherton, 1998). Ogden et al. (2014) found that in the sample of 9,120 participants in the 2011 to 2012 nationally representative National Health and Nutrition Examination Survey, 64.6% of non-Hispanic White women qualified as overweight or obese; 82.1% of non-Hispanic Black women qualified as overweight or obese; 76.2% of Hispanic women qualified as overweight and obese; 34.4 % of Asian American women qualified as overweight obese.

In terms of meeting criteria for clinical obesity, 33.7 % of non-Hispanic White women qualified obese; 56.7% of non-Hispanic Black women qualified as obese; 43.3% of Hispanic women qualified as obese; 11.4 % of Asian American women qualified as obese. These results suggest that the likelihood of working with overweight clients in therapy is substantial, and the likelihood of working with overweight Hispanic or Black women is particularly high.

Accompanying the disparity between obesity rates in Black and non-Hispanic White women in the United States, there are also differences in rates of medical illnesses associated with obesity. Black women are much more likely to develop type 2 diabetes (Brancati, Kao, Folsom, Watson, & Szklo, 2000). Black women who are obese are also more likely to die from cardiovascular disease than non-Hispanic White women (Ferdinand, 2008). While SES accounts for some of the disparity in obesity rates, a gap still exists between White women and women of color even after controlling for SES, education level, income, and location (Burke & Heiland, 2011). Factors such as stress can also contribute to health concerns, and stress is compounded by both high weight status and low SES. An analysis conducted by Johnston and Lee (2011) identified overconsumption of kilocalories as the most significant factor in explaining the average weight gap between Black and White women. It is important to note that BMI may not be the best measure of health risk for African American women. Flegal et al. (2010) noted that BMI does not reflect body composition, and that on average African American women have a lower body fat percentage and higher percentage of lean body mass than non-Hispanic White women. However, research consistently supports that very high

(over 35) BMI measures are consistently associated with cardiovascular risk in African American women.

Low SES overweight and obese African American women are less likely to have convenient access to grocery stores with fresh produce, which contributes to risk for both obesity and health concerns related to poor nutrition (Morland, Wing, & Diez Roux, 2002). Similar lack of access to nutritious food has been observed in low SES Hispanic families. Obesity disparity appears early, with the prevalence rate of obesity being 50% higher for Hispanic children than non-Hispanic White children by the eighth grade. It seems that for Hispanic female adolescents, specifically, obesity is a risk factor for the development of an eating disorder more so than other groups, possibly due to social stigma experienced in school environment. For older Hispanic women who are obese, social stigma appears to have somewhat less of an impact. A study conducted by Wee, Davis, Chiodi, Huskey, and Hamel (2015) found that Hispanic women who were obese reported that their weight had the greatest impact on their quality of life in the area of work. In contrast, non-Hispanic, obese White women reported social stigma to be a greater detriment to quality of life. This is not to say that age is necessarily a protective factor from social stigma related to weight in general, as sensitivity to weight stigma appears to be related to level of acculturation in Hispanic women (Alegria et al., 2007). As level of acculturation increases, it is possible that eating disorder rates in young Hispanic women in the United States will continue to rise.

An area that has not received much attention in eating disorder research is the intersection of race and weight in regards to counselors' bias. According to the concept

of disidentification, members of a stigmatized group disengage from and devalue the domain in which they are negatively stereotyped. For example, an African American woman might disidentify from the thin beauty ideal if doing so is psychologically protective (Steele, 1997). However, placing less value on these beauty ideals does not negate the effects of stigmatizing environments. Furthermore, it does not prevent others, including healthcare professionals, from responding to them differently based on both weight and ethnic background. Negative stereotypes of obesity and ethnic minority status have the potential to compound each other. For example, an African American woman who is also normal body weight will have access to higher social status than an African American woman who is obese, but still lower social status of a White woman who is normal weight. Similar patterns exist for women of Hispanic descent. In response, African American and Hispanic parents may exert pressure on their children to strive for thinness in an effort to encourage a rise in social status within the dominant culture (Saguy & Gruys, 2010).

While Black women do not appear to demonstrate the same stigmatizing attitudes towards obesity, on average, that non-Hispanic White women demonstrate (Hebl & Heatherton, 1998), they still experience weight-based stigma from healthcare professionals. Implicit racial bias has been observed in primary care professionals, and patients demonstrate awareness of this racial bias (Blair et al., 2013). Given the stigma by medical professionals towards obese women that has already been discussed, it is possible that obese African American women experience even greater stigmatization during medical visits. Considerable stigma is also experienced by individuals with eating

disorders, perhaps more so for individuals of color due to stereotyped assumptions about which populations are more or less vulnerable to them (Becker et al., 2010; Mond, Robertson-Smith, & Vetere, 2006; Stewart, Keel, & Schiavo, 2006). Relevant literature regarding eating disorders, including statistics, impacts, stigma, and diversity concerns is presented in the next section.

Eating Disorders

Statistics

The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013) notes that eating disorders are characterized by a persistent pattern of abnormal eating behavior that significantly impairs health or psychosocial functioning. There is some variance in estimates of eating disorder prevalence in women. According to the *DSM-5*, the 12-month prevalence of anorexia nervosa in young women is estimated to be .4% (American Psychiatric Association, 2013). Prevalence of other eating disorders appears to be higher. The *DSM-5* estimates twelve-month prevalence of bulimia nervosa at 1 to 1.5% and the prevalence of binge eating disorder (BED) as 1.6% (American Psychiatric Association, 2013). Micali et al. (2017) estimated lifetime prevalence rates for anorexia nervosa and atypical anorexia nervosa to be 3.64% and 1.7% respectively. Garner and Keiper (2010) estimated lifetime prevalence of anorexia nervosa as ranging between .3% and .6% and bulimia nervosa as 2.0% to 3.0%. Stice, Marti, and Rohde (2013) examined the prevalence of eating disorders in a sample of 496 female adolescents using *DSM-5* criteria and found a lifetime prevalence of .8% for anorexia nervosa, 2.6% for bulimia nervosa, 3.0% for

BED, and 2.8% for atypical anorexia nervosa. Although there are considerable gaps in the eating disorder literature regarding prevalence in men, current research indicates that eating disorders disproportionately affect women (American Psychiatric Association, 2013).

Considerably less research has been done with women past adolescent and young adult age categories. Results from Scholtz, Hill, and Hubert (2010) indicated a 1% prevalence of eating disorders in women over the age of 50 in an inpatient treatment setting. Ackard, Richter, Frisch, Mangham, and Cronmeyer (2013) noted an increase in the number of women over the age of 40 in inpatient eating disorder admissions between 1989 and 2006. It is unclear whether actual incidence of eating disorders is increasing amongst middle-aged women or if middle-aged women are more likely to seek treatment than in previous years. However, it is clear that mental health professionals must be aware of possible eating disorder risk in their clients regardless of age group.

Risk factors for eating disorders may be biological, familial, and cultural (Garner & Keiper, 2010). Twin studies indicate a higher incidence of disordered eating in monozygotic twins than dizygotic twins, which suggests a genetic predisposition. Estimated heritability rates for anorexia nervosa range from 48 to 76%; estimated rates for bulimia nervosa range from 50 to 83% (Striegel-Moore & Bulik, 2007). Estimated heritability for BED range from 41 to 57% (Thornton, Mazzeo, & Bulik, 2011). In addition, family climate may play a role. Enmeshment, abuse, and rigidity are all factors that may contribute to the development of eating disorders (Garner & Keiper, 2010). Furthermore, culturally determined beauty ideals may influence behavior. Idealization of

thinner body types may contribute to increased body dissatisfaction and dieting behavior, both of which are associated with disordered eating (Juarascio et al., 2011; Stice & Whitenton, 2002). In addition, dietary restraint, when coupled with body dissatisfaction and pursuit of the thin ideal, is a major risk factor for the development of an eating disorder (Rohde et al., 2015; Stice, Ng, & Shaw, 2010).

Unhealthy weight reduction practices are increasing among young adults, even when full criteria for an eating disorder are not met (Tylka & Subich, 2002; Wardle, Haase, & Steptoe, 2006). In their six year study of individuals ages 12 to 19 in an inpatient setting, Whitelaw et al. (2014) found a dramatic increase in the number of patients admitted due to restrictive eating practices despite being in a normal weight range. Furthermore, Whitelaw et al. (2014) found that these patients often presented with serious medical complications such as sinus bradycardia and hypophosphatemia. While individuals with atypical anorexia nervosa may have weights in the normal range when they present for treatment, their maladaptive thoughts and health complications are comparable to those who present meeting criteria for anorexia nervosa (Swenne, 2016). In a study conducted by Sawyer et al. (2016) of a sample of adolescent participants with anorexia nervosa and atypical anorexia nervosa, 71% of participants with atypical anorexia nervosa were previously overweight or obese, had lost more weight than participants with anorexia nervosa. Furthermore, there were no significant differences in the rates of bradycardia and orthostatic instability between the two groups. Despite the potential medical complications, adolescents with anorexia nervosa or atypical anorexia nervosa who have a history of being overweight or obese are less likely to receive

inpatient medical care than adolescents who do not have a history of being overweight or obese (Kennedy et al., 2017). One of the challenges of working with clients with atypical anorexia nervosa is that they are often viewed as being overweight and may have been urged to lose weight at one point by others, which can perpetuate disordered eating and make treatment more difficult (Moskowitz & Weiselberg, 2017).

Health Impacts

Eating disorders often present with both medical and mood-related symptoms. For this reason, it can sometimes be difficult to tease apart eating pathology from other psychiatric and medical diagnoses. As noted previously, eating disorders are defined, in part, by their physical and psychosocial impacts. Considerable health consequences are associated with restrictive eating behaviors and over-exercise seen in anorexia nervosa and atypical anorexia nervosa. Associated complications include mitral valve prolapse, gastrointestinal abnormalities, renal problems, reproductive health problems, and bone density loss (Rome & Ammerman, 2003). While some health consequences, particularly cardiac atrophy, infertility, and osteoporosis are associated with low body weight, health complications can arise from restrictive eating patterns and from over-exercise independent of weight status. For example, sinus bradycardia, orthostatic hypotension, and delayed gastric emptying may correlate with self-starvation and over-exercise even in cases in which an individual is not underweight (Rome & Ammerman, 2003). Both anorexia nervosa and atypical anorexia nervosa carry the potential risk of refeeding syndrome, a metabolic condition that can result from the reintroduction of nutrients to a severely malnourished individual. Risks of refeeding syndrome include seizures,

delirium, electrolytic imbalances, and cardiac complaints (Moskowitz & Weiselberg, 2017). In addition, individuals who over-exercise compulsively may be at increased risk of rhabdomyolysis, a potentially fatal condition that can lead to kidney failure (Li Cavoli et al., 2011). Alternating between extensive periods of caloric restriction and episodes of binge eating increases risk of gastric dilation regardless of body weight (Gyurkovics et al., 2006).

Psychosocial Impacts

Eating disorders have numerous mental and emotional impacts. In many cases, it can be difficult to identify whether emotional distress is the product or the cause of disordered eating. Neuroticism is a characteristic that is frequently identified as being associated with disordered eating (Lilenfeld et al., 2000; Tasca et al., 2009). Similarly, perfectionism appears to be a common characteristic associated with eating disorders, particularly restrictive eating patterns (Bardone-Cone, Sturm, Lawson, Robinson, & Smith, 2010; Lilenfeld, Wonderlick, Riso, Crosby, & Mitchell, 2006). Bulik, Sullivan, Carter, and Joyce (1996) suggested that anxiety contributes to the maintenance of eating disorder symptoms.

Correlations between depressed mood and eating disorders tend to be high. Brewerton et al. (1995) found that depression was the most common disorder diagnosed with bulimia nervosa with a rate of 63% of participants. Similar rates of comorbidity were found by Halmi et al. (1991) between anorexia nervosa and depression. Of their sample of female participants diagnosed with anorexia nervosa, 68% had a lifetime diagnosis of major depression. There is also evidence that restrictive behavior itself may

be a causal factor in depressed mood. Severe caloric restriction is associated with increases in corticotropin-releasing hormone, which is in turn associated with depressed mood. Similarly, caloric restriction is associated with serotonin dysregulation, which is also associated with depressed mood (Cowen, Anderson, & Fairburn, 1992). Lifetime prevalence for anxiety and depression are higher in individuals with binge eating disorder than they are in the general population (Strine et al., 2008).

There may also be a relationship between personality disorders and eating disorders. In a study conducted by Carroll, Touyz, and Beaumont (1996), 46% of depressed individuals with bulimia nervosa were diagnosed with at least one personality disorder, while 33.3% of non-depressed individuals with bulimia nervosa met criteria for one or more Axis II diagnosis. However, it is not clear whether or not the emotional dysregulation that is often associated with some personality disorders is the product or the cause of eating pathology. Clients who have not been appropriately assessed for an eating disorder may be misdiagnosed with a personality disorder when their symptoms are the result of irregular eating and compensatory behaviors. In addition, it is important to note that emotional dysregulation that can result from eating pathology has the potential to negatively impact daily functioning and interpersonal relationships.

For mental health professionals who are not familiar with different types of eating disorder presentations, disordered eating may be mistaken for depression. General emotional dysregulation correlates with eating disorders, and a primary eating disorder may be mistaken by a clinician as a possible personality disorder or cyclic mood disorder. It is crucial, therefore, that mental health professionals attend to reported disturbances in

eating and exercise patterns in order to fully assess for possible eating pathology. The leading cause of death for people with anorexia nervosa is suicide (Garner & Keiper, 2010). bulimia nervosa, while associated with lower suicide rates than anorexia nervosa, is still associated with significant suicide risk (Preti, Rocchi, Sisti, Camboni, & Miotto, 2011). The increased risk for suicide adds another concern for counselors who may be unfamiliar with or unprepared to treat eating pathology.

Eating Disorder Stigma

Like weight-based stigma, stigma associated with eating disorders has also been documented in a variety of settings. In general, mental illness is often stigmatized. Examples of stigma that have been identified towards mental illness include beliefs that people with mental illnesses are violent, and the tendency to create social distance from those with mental illnesses (Martin, Pescosolido, & Tuch, 2000). Fear of this stigma may lead those with eating disorders to avoid seeking treatment (Corrigan, 2004). Although eating disorders tend to elicit less negative attitudes than other categories of mental illness (Mond et al., 2006), they do appear to elicit certain specific biases amongst the general population. First, the social desirability of certain behaviors may influence stigmatization. Certain symptoms, such as caloric restriction, may elicit more positive responses from peers than negative judgment. However, these ego-syntonic symptoms may also elicit the judgment of self-centeredness and vanity (Crisafulli, Thompson-Brenner, Franko, Eddy, & Herzog, 2010; Mond et al., 2006). Binge eating and purging behaviors, on the other hand, are associated with perceptions related to lack of discipline, impulsiveness, and moral shortcomings (Ebetner, Latiner, & O'Brien, 2011).

Stigmatization associated specifically with eating pathology appears to be connected directly with attribution of responsibility; those with eating disorders are viewed as “doing it to themselves” and are more likely to be judged negatively by others (Ebetner et al., 2011). Furthermore, the misconception exists that people with eating disorders are only seeking attention and could choose to not have an eating disorder if they wanted to (Mond et al., 2006; Stewart et al., 2006). Another common misconception is that individuals with eating disorders should be able to “deal” with their diagnoses with more ease than other mental health diagnoses (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Mond et al., 2006)

In addition, there is a general misconception about how people with eating disorders appear. Weight is a highly influential factor in how people with eating disorders are evaluated by others. Although type and severity of eating disorder symptoms cannot be evaluated based on client appearance, weight can bias assumptions about what diagnosis a person has and what behaviors they engage in. Despite the fact that it is not a diagnostic requirement, obesity is often associated with a diagnosis of BED, and obese individuals who do not report binge eating behaviors are often still assumed to binge eat based on their weight (Bannon et al., 2009). Although some women with anorexia nervosa do engage in binge eating behavior, this behavior is rarely attributed to them (Elran-Barak et al., 2015). Individuals with bulimia nervosa who seek weight suppression through restrictive behaviors are more likely to engage in both binge and purge behaviors and are more likely to gain weight long term (Butryn, Juarascio, & Lowe, 2011), yet these behaviors may not be assumed by observers because weight is

within or above the normal range. Because of the stereotypes that restriction is associated with discipline, and that overweight and obese people are associated with lack of self-control, it is possible that observers may assume that restrictive behaviors do not occur based on appearance alone.

In summary, stigmatization has the potential to be damaging to individuals with eating disorders. People with eating disorders may feel generally misunderstood, which can be very isolating and form a barrier to seeking treatment (Walker & Lloyd, 2011). People with eating disorders may internalize negative attitudes about themselves (Crocker, Cornwell, & Major, 1993).

Self-Stigma

As with other forms of mental illness, eating disorders may lead to self-stigma. Self-stigma, in turn, reduces the likelihood that people who are coping with mental illnesses will seek help (Vogel, Wade, & Hackler, 2007). People with bulimia nervosa often report the belief that they have no self-control, as well as experiencing guilt and shame related to their eating disorder behaviors (Griffiths, Mond, Murray, & Touyz, 2015). Similar results have been found with anorexic individuals who internalize negative stereotypes about eating disorders. Examples include the beliefs that they are selfish and that their problems are not legitimate (Maier et al., 2014). Other negative descriptors anorexic individuals may apply to themselves include boring, weak, and undesirable (Puhl & Suh, 2015). The degree to which people with eating disorders experience self-stigma appears to vary with the degree to which they feel personally responsible for their illnesses (Easter, 2012). As mental illnesses, eating disorders are

attached to a general negative stigma. However, they also carry the additional stigma of being “choices.” Indeed, until the most recent edition of the *DSM* (APA, 2013) the criteria for anorexia nervosa contained the word “refusal” in reference to weight maintenance. This type of wording suggests that a person who has anorexia nervosa has a certain degree of control over their illness in a way that people with other diagnoses such as schizophrenia and bipolar disorder do not. Easter (2012) also observed that while de-emphasizing personal blame by focusing on genetic heritability may reduce self-stigma for many people with eating disorders, it may have the opposite effect for others. Specifically, the belief that genes are fundamentally “flawed” in some way may contribute to negative self-image and an increased sense of helplessness. Self-stigma based on sense of personal responsibility appears to be greatest in people presenting with BED. Similar to other eating disorders, the stigma that is rooted in self-blame appears to be linked with negative treatment outcomes (Puhl & Suh, 2015).

Self-stigma may also be influenced by cultural norms. Certain cultures may attach more shame or less importance to eating pathology, leading people with eating disorders to hide symptoms from other members of their cultural group due to fear and shame. They may also be less likely to seek treatment due to perceived conflict with cultural values and norms (Hackler, Vogel, and Wade, 2010). There is no research available specifically on self-stigma as it manifests in individuals with atypical anorexia nervosa. Given the previous research that suggests people with eating disorders often do not believe their disorders are legitimate, however, it is possible that anorexic individuals

who are not clinically underweight may endorse the belief that they are not deserving of help due to not having a “serious” enough disorder.

Eating Disorder Stigma Among Providers

Given that general stigma and self-stigma may contribute to fear of seeking or remaining in treatment, it is of great importance that healthcare providers not continue this pattern of stigmatization in their practice. Working with clients who have eating disorders may be particularly challenging due to the specific strong reactions they stir in practitioners. While it might be anticipated that mental health professionals who specialize in treating eating disorders would not demonstrate weight bias, Puhl et al. (2014) found that 42% of specializing practitioners endorsed negative stereotypes about patients who presented for eating disorder treatment if the patients were obese. Davis-Coelho et al. (2000) found that sampled psychologists who evaluated a self-description and photograph of a White female client were more likely to diagnose body image disturbance if the photograph was overweight. However, this assessment was made without knowledge of symptoms, behavioral patterns, eating habits, recent weight fluctuations, or any other clinically relevant behaviors. Perceived self-confidence may impact a clinician’s eating disorder stigma. Thompson-Brenner, Satir, Franko, & Herzog (2012) looked at 20 studies between 1984 and 2010 that examined clinician attitudes towards eating disorder patients. They found that negative attitudes towards patients appeared to be related to lack of confidence, while more experienced clinicians demonstrated more positive attitudes towards patients with eating disorders. Franko and Rolfe (1996) found that counselors reported feeling less connected and less engaged with

clients who presented for eating disorder concerns vs. clients who presented for depression. Delucia-Waack (1999) observed that counselors who work with clients with eating disorders may demonstrate increased awareness of their own bodies and may alter their relationships with food. Delucia-Waack (1999) recommended that this specific form of countertransference be addressed carefully and thoroughly in supervision in order for counselors in training to gain competence in working with eating disorders.

One of the factors that may contribute to eating disorder stigma in therapists, specifically, is *disidentification*. Disidentification arises when therapists categorize clients inflexibly and, in more extreme cases, characterize them based solely on diagnosis (Servais & Saunders, 2007). Atwood (1982) described this process occurring amongst mental health professionals with clients who presented with psychotic symptoms. While mental health professionals depend, to an extent, on diagnostic categories to help guide their treatment recommendations, the process of categorization can facilitate stigmatization if negative prejudices are automatically assigned to members of a specific group. Similar assignation of stereotypes has been identified with clients presenting for chemical dependency issues such as alcoholism (Potamianos, Winter, Duffy, Gorman, & Peters, 1985). While the pattern evident in clients presenting with psychosis and addiction cannot necessarily be extrapolated to clients with eating disorders, it is certainly possible that specific negative stereotypes are associated with diagnostic categories of eating disorders. Disidentification may be particularly salient to eating disorders cases because of the widely held misconception that eating disorders can be easily categorized based on physical presentation.

Eating Disorders in Women of Color

There is a widely held misconception in the United States that eating disorders are the domain of White women. There are several factors that may contribute to this misconception. First, clinical samples in research studies continue to be disproportionately White (Cachelin et al., 2001). Despite the fact that White middle class women and girls are more likely than poorer and/or ethnic minority women to be diagnosed with anorexia nervosa or bulimia nervosa, eating disorders occur across ethnic groups (Cachelin, Veisel, Striegel-Moore, & Barnagarnazari, 2000; Cachelin, Striegel-Moore, & Elder, 1998; Lester & Petrie, 1998). There have been conflicting findings regarding the prevalence of different eating disorders in different ethnic groups. Swanson, Scott, LeGrange, Swendson, and Merikangas (2011) found rates of bulimia nervosa to be highest in Hispanic adolescents and anorexia nervosa to be higher in White adolescents than in Black or Hispanic adolescents. Gordon, Castro, Sitnikov, and Holm-Denoma (2010) identified no differences in symptom prevalence between White and Hispanic college students but found a significantly lower rate among Black college students. In contrast, Franko, Becker, Thomas, and Herzog (2007) found no significant differences across groups, and Marques et al. (2011) found no differences in rates of anorexia nervosa across groups but found higher rates of bulimia nervosa in Hispanic and African American women. One possible explanation is that women from minority groups are less likely to seek treatment. Help-seeking behavior may vary widely across ethnic groups due to factors such as perceived seriousness of symptoms and perceived trustworthiness of providers. Level of acculturation may play a role in level of treatment

seeking by ethnic minority women; women who are less acculturated may be less likely to seek professional help for an eating disorder (Cachelin et al., 2000). In addition to cultural norms, other social factors such as economic constraints and inequalities in healthcare distribution create impediments in providing care for those with eating disorders (Becker et al., 2010; Cachelin et al., 2001). Clients' perception of clinicians' sensitivity to their cultural background influences level of treatment seeking (Becker et al., 2010). Clients who do not think they will be believed or understood by their counselors will be less likely to disclose. This fear, compounded with the very real possibilities of negative social stigma and prohibitive cost, lead to a lower reporting rate for ethnic minority women (Becker, et al., 2010). Given what has already been discussed about weight stigma, it is possible that ethnic minority women who are also overweight may be even less likely to report eating disorder symptoms to a new counselor.

Another possible explanation is that women from minority groups are less likely to receive referrals for treatment. One of the reasons for this disparity is counselor expectations about ethnicity and eating disorder risk. For example, Becker et al. (2003) found that Latina and Native American women who participated in the National Eating Disorders Screening Program and who reported eating disorder symptoms were significantly less likely to receive referral for eating disorder services than White women who reported the same level of eating disordered symptoms. Furthermore, they were less likely to have been asked by their doctors about eating disorder symptoms. Gordon et al. (2006) sampled 91 clinicians in a vignette study and found that they were significantly

less likely to recognize eating disorder symptoms when the client in the vignette was African American.

Media representation of eating disorders also influences general perception of who develops eating disorders. Saguy and Gruys (2010) sampled news media and found that the vast majority of news stories covering anorexia nervosa and bulimia nervosa focused on young White women. In contrast, the authors found that news coverage on obesity focused more on Latino and Black individuals. Furthermore, they identified a pattern of media sources explicitly blaming cultural and community-based factors for obesity amongst ethnic minority populations. Similar patterns of blaming were documented in coverage of BED with sampled news coverage minimizing symptoms and attributing BED to a lack of will power. It is reasonable to posit that if ethnic minority women are underrepresented in media coverage of eating disorders, the general population may be less likely to consider them as possibly having an eating disorder.

One reason that African American women may be less likely to receive an eating disorder diagnosis is the assumption that they are “immune” to body dissatisfaction. While there is evidence that body image issues may manifest differently or occur at different rates in African American women (Henriques & Calhoun, 1996; Schooler, Ward, Merriwether, & Caruthers, 2004; Watson, Robinson, Dispenza, & Nazari, 2012), it is far from conclusive and requires more thorough study. There is evidence that African American women report lower levels of body dissatisfaction than White women (Baugh, Mullis, Mullis, Hicks, & Peterson, 2010; Moradi & Huang, 2008). Nichter (2000) suggested that African American women may engage in less negative body-related self

talk than White women. Furthermore, it is possible that African American women endorse different and less restrictive criteria for physical attractiveness (Breitkopf, Littleton, & Berenson, 2007). In addition, there is evidence that African American women value a curvaceous body ideal over a thin ideal (Molloy & Herzberger, 1998; Overstreet, Quinn, & Bede Agocha, 2010). However, Mulholland and Mintz (2001) found that in their sample of 413 African American college women, 23% demonstrated eating disorder symptoms. In a survey of 6,504 adolescents, 31.9% African American students, 36.1% Hispanic students and 48.1% Native American students reported that they had actively tried to lose weight. 34.1% of the White students reported attempting to lose weight (Kilpatrick, Ohannessian, & Bartholomew, 1999).

Furthermore, there is evidence that both White and Black American women harbor implicit anti-fat bias. Hart, Sbrocco, and Carter (2016) found that in a sample of 598 women who completed an online implicit association test, a general anti-fat bias was found for all participants regardless of race. These beliefs included that heavier women were unattractive, “bad,” and unhealthy while thinner women were attractive, “good,” and healthy. Clearly, there is evidence that while African American women may embrace a less thin body ideal, they are not invulnerable to disordered eating, unhealthy body image, or preoccupation with shape and weight. Similarly, Hispanic women appear to demonstrate increasing rates of disordered eating and body image concerns (Blow, Taylor, Cooper, & Redfern, 2010). However, counselors may not recognize signs of an eating disorder due to the preconception that these women are most likely presenting with some other type of diagnosis. Given that clinicians are less likely to recognize symptoms

of anorexia nervosa in African American and Hispanic women who are of normal weight than White women who are of normal weight (Gordon et al., 2002), it is possible that they would be even less likely to attend to these symptoms when these clients are also overweight. However, one of the goals of this study is to identify what, if any, interaction may exist between race and weight, as no previous comparable studies have been conducted.

Relationship Between Eating Disorders and Obesity

It is important to note that within the context of this paper the term obesity is treated as a concept that is distinct from eating disorders. Because of the connection between eating behaviors and weight, it is sometimes assumed that binge eating behaviors can be evaluated based on weight. Obesity is not categorized as an eating disorder by *DSM-5* (American Psychiatric Association, 2013). According to the *DSM-5*, BED may occur in normal weight or overweight individuals. However, the disorder is “reliably associated with overweight and obesity in treatment seeking individuals,” (p. 351), but obesity and BED are distinct. The *DSM-5* also notes that individuals with bulimia nervosa and atypical anorexia nervosa may present as overweight or within a normal weight range. However, there is a well-documented overlap between obesity and eating disorder diagnoses. Estimates of percentage of obese individuals who seek bariatric surgery who have BED vary from 7.5% (Ricca et al., 2000) to 30% (Spitzer, et al., 1992).

Conceptual Issues in Diagnosis

One of the challenging issues in the treatment of eating disorders is balancing the categorical nature of eating disorder diagnosis with the spectral nature of eating disorder symptomatology. The *DSM-5* does not provide any kind of guideline to define when non-purging compensatory behaviors and restrictive eating behaviors become excessive. The *DSM-5* provides specifiers for anorexia nervosa, but these are based purely on BMI. A specifier of mild anorexia nervosa is applied with a BMI of 17 or higher; a specifier of moderate is applied with a BMI of 16.0-16.99; a specifier of severe is applied with a BMI of 15.0-15.99; a specifier of extreme is applied with a BMI below 15.0 (APA, 2013). While these specifiers are helpful in terms of determining potential risk associated with low body weight, and while BMI is certainly correlated with long-term restrictive eating patterns, they do not directly indicate the severity of restricting or purging patterns with which a client might be presenting. If clients present with recent extreme weight loss due to restrictive eating and excessive exercising but do not meet the low weight requirement for anorexia nervosa, they would most likely be diagnosed with atypical anorexia nervosa if no bingeing or purging were reported. However, there are no existing specifiers for atypical anorexia nervosa to signify the severity of the reported eating pathology.

Atypical anorexia nervosa is housed under the diagnostic category of Other Specified Feeding or Eating Disorder (OSFoED). The *DSM-5* describes this category as disorders that cause “significant distress or impairment in social, occupational, or other important areas of functioning” (p. 353) but do not meet criteria for any of the other eating disorder. For example, clients who do not fully meet the criteria for bulimia

nervosa due to low frequency of bingeing and purging, or due to limited duration of symptoms, would also be diagnosed with OSFoED. Similarly, clients who report binge eating but do not meet frequency or duration criteria for BED are also categorized under OSFoED. A client who reports recurrent purging behavior in the absence of binge eating would be categorized as having purging disorder and also housed under OSFoED. Finally, night eating syndrome, which is characterized by episodes of eating excessively at night, is also grouped under OSFoED (APA, 2013).

With the new *DSM-5*, criteria for anorexia nervosa and bulimia nervosa became somewhat more relaxed, and BED was added as a diagnosis. These changes were made, in part, as a response to the “eating disorder not otherwise specified” (EDNOS) category, a category that was removed due to its heterogeneity and lack of clinical utility (APA, 2013). However, it is unclear whether or not the introduction of OSFoED offers any more clinical utility than EDNOS. A study by Fairweather-Schmidt and Wade (2014) found no significant differences in impairment levels of those diagnosed with OSFoED and those diagnosed with threshold eating disorders (anorexia nervosa, bulimia nervosa, and BED) in a clinical sample of 699 adolescents. These results suggest that strictly relying on weight as an indicator of severity may lead clinicians to develop an inaccurate estimation of risk.

Restrictive Eating in Obese and Overweight Women

There is a growing national health initiative to address obesity. With the push for obese individuals to lose weight, severe restrictive behaviors may not be recognized or may even be condoned by providers. Furthermore, providers may not be attuned to

eating disordered behaviors in patients based on their weight status. Providers who do not interpret restrictive eating patterns and sudden weight loss as possible signs of disordered eating may not pursue a more detailed line of exploration with clients that could identify additional symptoms or possible medical risks. Furthermore, given the pervasive social pressure to maintain average or below average body weight, providers may assume that any overweight client they encounter will exhibit some degree of body dissatisfaction (McLean, 2013). Therefore, the preoccupation with shape and weight seen in some clients with eating disorders may go unnoted or be underemphasized by counselors who are forming a diagnostic conceptualization.

Creating further difficulties in recognition of pathological restriction in obese women is the lack of clarity in how the literature distinguishes it from dieting. The term “dieting” is difficult to define, as it has not been consistently operationalized in the professional literature. The National Institute of Health (2000) Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obese Adults recommends a loss of 10% body weight in approximately 6 months. The recommended daily caloric deficit is 300 to 500 kcal per day in adults whose BMI falls between 27.0 and 35.0. For adults whose BMI falls above 35.0, the recommendation is a deficit of 500 to 1000 kilocalories per day. The recommended caloric deficit is subtracted from one’s Estimated Energy Requirement (EER) in order to obtain recommended daily intake for healthy weight loss. The EER is based on calculations of an individual’s basal metabolic rate (BMR) added to energy expenditure due to daily activity (WHO, 2001). The WHO (2001) uses the following equation for calculating BMR for adults age 18 to 29: $61.5 \times$

weight (kg) + 2080. For example, an 18-year-old woman weighing 120 pounds would have an estimated BMR of 5434.5 kJ/day or 1298.9 kcal/day. Based on the WHO estimates for expenditure related to daily activity, an 18-year-old woman with a moderately active lifestyle will be 2206 kcal/day, and 1818 kcal/day for a completely sedentary lifestyle (WHO, 2001). Deficits more extreme than 1000 kcal per day are often referred to as very low calorie diets (VLCDs) and include daily caloric intake ranges between 400 and 800 kilocalories per day (Wadden, 1993). Although VLCDs gained popularity for the treatment of morbid obesity in the late 1970s and 1980s in the United States, the American Dietetic Association issued an official position in 1990 that VLCDs of 400 to 800 calories per day carry health risks and must not be undertaken without careful monitoring by a physician (Paulsen, 1990).

In addition to the vagueness of the term “dieting,” there are also moral implications attached to dieting, weight loss, and body size that potentially influence how weight loss is interpreted. St. James, Handelman, and Taylor (2011) describe dieting as not simply a physical transformation but as a kind of moral journey in which a person transforms into a better person as a result of weight loss. Furthermore, in the contemporary U.S. dominant culture, appearance is inherently linked with health, and virtue is associated with the food one chooses to eat or not eat (Jutel, 2005). These factors have the potential to influence an observer to see an overweight individual’s weight loss as inherently positive, which is problematic in cases of medically dangerous weight loss.

While there is extensive research on BED symptomatology in overweight and obese individuals, there is limited research on excessively restrictive behaviors in this population. The National Task Force on the Prevention and Treatment of Obesity issued a report stating that moderate caloric restriction does not appear to be tied to the development of eating disorders (AMA, 2000). Moderate restriction, as defined by the authors, requires a daily caloric deficit of 500 to 700 kcal/day. They defined severe caloric restriction as a deficit of at least 1000 kcal/day. Despite the fact that extreme restricting behavior appears to be a shared risk factor for both obesity and anorexia nervosa (Haines, Neumark-Sztainer, Eisenberg, & Hannan, 2006), considerably less research has been conducted on more extreme caloric intake reduction in overweight and obese individuals. One of the possible reasons for the association between restrictive eating practices and obesity may be connected to binge eating behavior. Wadden et al. (2004) found that in a sample of 123 obese female participants, those who were placed on a 1000 calorie liquid meal replacement were significantly more likely to demonstrate binge eating behaviors than both a control group and a group placed on a 1200 to 1500 calorie diet of “conventional” solid foods. Furthermore, The National Task Force on The Prevention and Treatment of Obesity concluded that binge behaviors appeared as caloric deficits shifted from moderate to severe (American Medical Association, 2000). Despite the fact that severe caloric restriction is not the standard recommendation for obese individuals, many clinicians may not recognize the severity of restrictive behaviors due to lack of sufficient education, or may consider the behavior appropriate due to the client’s weight status. General practitioners are more likely to recommend weight loss and

dietary advice to obese patients that present with eating disorder symptoms, rather than a referral for eating disorder treatment (Mitchison, Basten, Griffiths, & Murray, 2017). In other words, behavior that would be more readily recognized as pathological in normal or underweight clients may be minimized, disregarded, or even praised in overweight and obese clients.

The limited research that exists on restrictive eating habits amongst overweight and obese individuals has traditionally focused on risk potential for BED rather than anorexia nervosa or bulimia nervosa. For many, extreme restrictive eating habits exhibited by obese individuals may be viewed as appropriate rather than as warning signs of a developing eating pathology. Lebow, Sim, and Kransdorf (2015) studied a sample 179 adolescents receiving treatment for either anorexia nervosa or eating disorder not otherwise specified due to weight loss and dietary restriction. Of this sample, 19% had a history of being clinically obese, and 17% had a history of being clinically overweight. There were no significant differences found in eating disorder severity between adolescents who had no history of being overweight or obese and those who did have a history of being overweight or obese. Furthermore, the participants who had previously been overweight or obese presented with more drastic weight loss and with a longer duration of illness prior to seeking treatment. Although this study cannot be generalized across the lifespan, it suggests that obese individuals who exhibit drastic weight loss due to severe caloric restriction may be demonstrating signs of a restrictive eating disorder regardless of current BMI.

Restrictive eating patterns and drastic weight loss are traditionally associated with a diagnosis of anorexia nervosa and, to a lesser extent, bulimia nervosa. According to *DSM-5* (APA, 2013) a core diagnostic criterion of anorexia nervosa is “significantly low body weight in the context of age, sex, developmental trajectory, and physical health” (p. 338) due to caloric restriction. In addition, the diagnosis also requires fear of weight gain and disturbance in one’s body image. However, the *DSM-5* notes, “many individuals have a period of changed eating behavior prior to full criteria for the disorder being met.” (p. 342). Therefore, it is possible for overweight individuals to exhibit behaviors congruent with a diagnosis of anorexia nervosa and may later develop the disorder. Indeed, the *DSM-5* takes these individuals into account with the diagnosis of atypical anorexia nervosa. atypical anorexia nervosa, a subtype of OSFED, is characterized by all criteria for anorexia nervosa being met except that “despite significant weight loss, the individual’s weight is within or above the normal range.” (p. 353).

It is important that counselors recognize that despite the low weight criterion not being met, significant medical complications can arise in patients who present with atypical anorexia nervosa. Whitelaw et al. (2014) found similar medical complications stemming from restricting behaviors in a sample of inpatient adolescents regardless of weight status. Whitelaw et al. (2014) recommended that higher weight adolescents who have lost significant weight due to restrictive eating behaviors should receive careful medical monitoring.

Applied Concerns in Clinician's Competency

Training. While eating disorders often present with medical complications and are associated with a high mortality rate, training in eating disorder recognition and treatment does not appear to be standard. In a survey of 637 U.S. training programs for psychiatric residents conducted by Mahr et al, (2014), 514 (81%) offered no scheduled or elective rotations in eating disorders units. Child and adolescent psychiatry appeared to offer the most opportunities for training. Boule and McSherry (2002) looked at training for family physicians and found that 75% of those sampled rated their training on eating disorders as poor, while 59% rated their post graduate training as unsatisfactory. Less is known about the general competency of counselors in regards to working with eating disorders. Robinson, Boachie, and Lafrance (2012) found that the majority of psychologists sampled did not routinely screen for eating disorders in their adolescent clients. In a follow-up study, Robinson, Boachie, and Lafrance (2013) examined self-assessed competence levels in psychologists and physicians, finding a general interest in receiving specialized training, but an overall pattern of low reported competency. There are limited guidelines provided to counselors working in private practice on how to screen for eating disorders (Berg, Peterson, & Frazier, 2012). Furthermore, training in recognizing and treating eating disorders is typically limited (Mahr et al., 2014). Counselors in private practice who do not choose to specialize may still encounter clients with eating disorders. Furthermore, due to various factors, clients may not be transparent about abnormal eating and exercise habits. If clinicians choose to screen for eating

disorders based purely on weight cues or client request, they may miss eating pathology and its potential associated health risks.

Combatting negative bias in mental health professionals. Weight bias appears to hinge on both level of training and level of empathy with overweight clients. For example, Young and Powell (1985) found that overweight mental health professionals were less likely to assign negative characteristics to hypothetical clients based on their weights. Furthermore, the authors found that less experienced mental health professionals were more likely to make negative judgments of hypothetical clients based on their weights. Davis-Coelho et al. (2000) identified similar results, finding that mental health professionals who were both relatively inexperienced and chronologically young were more likely to assign negative judgments based on weight.

Per the APA's Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality (2017), multicultural competence requires that psychologists maintain awareness of their biases and how their own cultural identities influence their perceptions of clients. Based on previous research conducted on weight-based bias, weight is a stigmatizing facet of identity. As such, it would make sense to include it in diversity education required by all mental health training programs. However, many training programs do not address weight as a diversity variable, and weight is not included in the majority of multicultural training courses. Therefore, mental health professionals in training are not encouraged to explore and challenge their own biases related to weight. Personal biases directly impact therapeutic efficacy (Currin, Waller, & Schmidt, 2009), yet if trainees do not recognize weight bias as

problematic they may never make the effort to facilitate personal change.

Given that previous research indicates that people are less likely to stigmatize overweight and obese people when weight status is framed as not being in the person's immediate control, it would also make sense to include education about the factors that contribute to the development and maintenance of obesity. Given the pervasive pattern of stigmatization of overweight people in the United States, it is necessary that counselors be prepared to recognize weight bias and how it impacts client wellbeing. Furthermore, it is critical that psychotherapists recognize how their own internalized bias may affect their competency in therapeutic work. Because weight is, in many ways, one of the "last acceptable targets of discrimination," (Puhl & Brownell, 2001, p 788.), it would be tremendously beneficial to clients if their counselors were more willing and able to advocate for them in the face of socially-sanctioned discrimination.

In addition to diversity training related to weight, it would also be beneficial to increase the specific education aimed towards eating disorders in graduate counseling psychology programs. As it stands, most programs do not include specific education related to working with eating disorders (Mahr et al., 2014). As discussed previously, negative judgment may be associated with eating disorders due to the mistaken presumption that eating pathology is volitional and within the client's immediate control. Presenting education of heritability of eating disorders as part of counselor training may be helpful in reducing stigma (Easter, 2012).

Various factors may contribute to biased clinician diagnosis. Warner (1979) posited that clinicians may be less likely to be biased against clients who are the same

race and gender as themselves. Clinicians may also be influenced by their specific theoretical orientations and training backgrounds to interpret symptoms in different ways (Aboraya, Rankin, France, El-Missiry & Collin, 2006). McLaughlin (2002) identified stereotyping, confirmation bias, and the availability heuristic as major sources of counselor diagnostic bias. Until this point, however, research specifically addressing clinician factors in eating disorder diagnosis has been very limited.

Gaps in the Literature

Research on the extent and quality of eating disorder training in graduate psychology programs is limited. The majority of literature covers physicians, psychiatrists, dietitians, and, to a lesser extent, psychologists. Given the likelihood that a counselor will encounter a client with eating pathology at some point, and given the potential medical risks that accompany incompetent treatment of eating pathology, it is surprising that more work has not been done in this area. A specific category of eating disorder that is underexplored in the literature is atypical anorexia nervosa. A new addition to the *DSM-5*, this category accounts for clients who exhibit symptoms of anorexia nervosa but who have not yet met the weight loss requirement. Greater exploration of this diagnostic category could be beneficial in early intervention at the outpatient level, yet there has been little exploration of how it typically presents and how it is screened for. While previous research has explored variations in treatment recommendations and diagnoses based on client weight, no previous research to date has examined how weight bias might influence an outpatient therapists' attendance to and interpretation of eating pathology. The present study has contributed to filling this gap.

Rationale for the Proposed Investigation

There is well-documented weight stigma present in the general population in the United States (Bessenoff & Sherman, 2000; Crandall, 1994; King et al., 2006, Puhl & Brownell, 2001; Teachman et al., 2003). This stigma extends to those working in the helping professions and those in training (Foster et al., 2003; Jay, et al., 2009; Puhl & Brownell, 2006; Teachmann & Brownell, 2001). This stigma may lead to inaccurate application of diagnoses such as depression and anxiety disorders, and is associated with negative predictions of treatment outcome (Pascal & Kurpius, 2012; Puhl, Latner, King, & Luedicke, 2013)). In addition, clinicians may assume the presence of binge eating symptoms in obese clients without actually screening for them (Bannon et al., 2009).

Similarly, bias is observed in how Black women and Hispanic women are assessed for eating disorders. Eating pathology, specifically restrictive eating pathology, is more likely to be recognized in White women than in Black or Hispanic women (Gordon et al., 2002). Furthermore, Hispanic and African American women are less likely to seek treatment for an eating disorder due to self-stigma, fear of being stigmatized by providers, concern that their presenting problems will not be taken seriously, and for some, a lack of financial resources (Hackler, et al., 2010).

Certain behaviors, such as compulsive over-exercise and restrictive eating may not be assessed by clinicians if clients present as overweight. Research supports that a significant number of adolescents with a history of obesity are being diagnosed with and treated for anorexia nervosa and bulimia nervosa (Lebow et al., 2015); although, thus far, no studies have attempted to study this pattern in young adults. However, it is clear that

catching rapid weight loss resulting from eating and exercise pathology is an important goal to meet at the outpatient level, before higher levels of care are required and before significant medical complications emerge. It is important to identify bias that might prevent counselors from recognizing certain pathological eating behaviors in women of size. Furthermore, given the stereotype that eating disorders in the United States are limited to White women, it is important to investigate and interactions between weight and ethnicity that might compound clinician bias. Identifying potential barriers to accurate diagnosis and competent care is a crucial step to improving education and training for mental health practitioners. The study conducted by Gordon et al. (2002) examining racial bias in eating disorder diagnosis was extended with the addition of a weight condition, and served as a template for the methodology of the proposed investigation.

Research Questions

The primary research question for this study was, “Do weight bias and ethnic bias impact counselors’ recognition of eating pathology?” Interactions between weight and ethnicity were explored in respect to counselors’ ratings of symptoms and recommendations for treatment. Additional questions included, “Is there a relationship between accurate appraisal of eating pathology and level of training?” and “Is there a relationship between participants’ own ethnicity and BMI, and their response to the clinical vignette?” These questions are operationalized in the Methods section.

CHAPTER III

METHOD

This chapter details the data selection procedure, materials, and analysis plan that were used in the study. Specific hypotheses and analyses are presented at the end of the chapter.

Participants

A systematic randomized sample ($N = 306$) of participants was selected from the state rosters of licensed professional counselors in five different states: Texas, California, New Hampshire, New Jersey, and Idaho. The majority of participants that completed the survey were located in Texas (54%) and New Jersey (21%). After approval was obtained from the Institutional Review Board, a total of 4,300 counselors were contacted by e-mail with a description of the study and a link to the survey on PsychData. Of those contacted, 407 followed the link and consented to participate, but 101 participants exited the survey upon reaching the vignette without answering any questions. These participants were removed from the data set prior to analysis.

Instrumentation

Vignettes

For this study, six clinical vignettes were used (See Appendix A). The vignette was a slight variation of the one used by Gordon et al. (2006). It included a description of the daily routine of a young woman. The behaviors of the person in the vignette are

congruent with those of an individual with anorexia nervosa. Behaviors described in the vignette include excessive food restriction and excessive exercise. In addition, the woman in the vignette displays excessive concern with appearance. With the permission of the authors, the original vignette by Gordon et al. (2006) was altered slightly to meet the conditions of this study. First, the name of the subject was changed from the original (“Mary”) to initials (L.N.). The name was changed to initials in order to reduce any cultural associations made by participants with a particular first name. The initials were selected with a random letter generator. In addition, the woman’s weight and height were included in the altered vignette.

Two factors were manipulated within the vignettes: weight and ethnicity. There were three categories of ethnicity presented: White, Hispanic, and Black. In all conditions, L.N. was described as an 18-year-old female who is five feet four inches tall. This height was selected as it is close to the United States national average for female height (Centers for Disease Control, 2012). In the low weight condition, the vignette states that L. N. has reduced her weight from 120 pounds to 90 pounds over the course of six weeks. In the high weight condition, the vignette stated that she has reduced her weight from 185 to 139 over the course of six weeks. In both cases, L.N. was described as losing 25% of her body weight over the same short period of time. Although BMI was not provided in the vignette, L.N.’s change in BMI was from a normal BMI of 20.6 to a significantly below normal BMI of 15.9 in the low weight condition. In the high weight condition, L.N.’s BMI changed from an obese BMI of 31.8 to a BMI of 23.9, which is considered to be within the normal range. Both scenarios featured identical descriptions

of disordered eating and exercise behavior. In terms of restrictive eating, exercise level, and weight loss, L.N. meets criteria for atypical anorexia nervosa in the higher weight condition and anorexia nervosa in the lower weight condition according to the *DSM-5* (APA, 2013). The specific percentage of body weight and length of time were selected in order to convey weight loss that is more drastic than any that would be recommended by a physician. As discussed previously, although very low calorie diets have been recommended for obese patients with medical complications, the rate of weight loss present in the vignette is more than twice as rapid as the weight loss rate officially recommended by the National Institute of Health for obese patients (NIH, 2000). Therefore, there should have been no reason that participants would confuse the restrictive behaviors in the vignette for a medically recommended diet.

Clinical Survey

Participants were asked a series of questions about diagnosis, symptom frequency, symptom severity, and treatment (See Appendix B). Participants were presented with a series of potential presenting problems and asked to rate the likelihood that they would identify each as a presenting problem for L.N. on a 5-point scale. These potential problems included anxiety, depression, eating disorder, and psychosis. Participants were then asked which of these presenting problems they would be most likely to select as the primary concern for L.N. Participants were asked to rate the severity of the primary problem on a five-point scale. Participants were asked in a yes or no format question if they would recommend L.N. follow up with a medical doctor. Participants then answered a series of questions related to frequency of eating disorder symptoms. These questions

were taken with permission from the anorexia and bulimia subscales of the Child and Adolescent Symptom Inventory 5 or CASI-5 (Gadow & Sprafkin, 2013). The items on these subscales asked raters to select the frequency of specific eating disorder symptoms. These subscales were selected because to the author's knowledge there are no clinician-rated eating disorder symptom inventories being used in eating disorder assessment. The Reliability for the anorexia and bulimia subscales was calculated using Cronbach's alpha internal consistency coefficient. Cronbach's alpha for the anorexia and bulimia subscales were .75 and .65, respectively. In addition, participants were asked to rate the severity of specific symptoms on the same 0-3 scale. These items were written by the author but were derivative of common items on multiple eating disorder inventories, such as the Eating Disorder Inventory 3 (EDI-3; Garner, Rosenvinge, Friborg, & Rokkedal, 2004) the Stirling Eating Disorder Scales (SEDS; Williams & Power, 1995), and the Eating Disorders Examination Questionnaire (EDE-Q; Fairburn & Beglin, 1994). The EDI-3 has high reliability, Cronbach's $\alpha = .90$ (Garner, 2004). The SEDS has similarly high reliability, Cronbach's $\alpha = .8$ (Williams et al., 1994). Reliability of the EDE-Q subscales range from $\alpha = .81$ to $\alpha = .92$ (Luce & Crowther, 1999). Symptoms listed included bingeing behavior, purging behavior, body dissatisfaction, excessive exercise, weight loss, academic difficulties, and social difficulties.

Demographics

At the end of the survey process, participants were asked to provide demographic information. Information requested for the study included: age, gender, ethnicity, number of years of experience, degree type, height, and weight (see Appendix C).

Procedure

Following Institutional Review Board (IRB) approval, prospective participants received a preliminary recruitment letter via e-mail (see Appendix D). Those who elected to participate completed an online survey through the website PsychData.com. PsychData servers are housed in a secure data facility, and PsychData services meet Internet security standards and IRB requirements for protection of participant information (“Security Statement,” n.d.). Participants were first directed to the informed consent form in PsychData (see Appendix E). They were then directed to a screen instructing them to read a clinical vignette. After reading the instructions, they were randomly directed to one of the six possible vignettes. After reading the vignette, participants were directed to the Clinical Impressions section of the survey and instructed to complete it. They were then directed to the Eating Disorder Components section of the survey. Once the survey was completed, participants were directed to complete demographic information. Once on the demographic screen, they were not permitted to go back and alter any survey responses. After completing the demographics section, participants were directed to a debriefing form explaining the purpose of the research and providing contact information for the research team in the event that participants wish to seek additional information (see Appendix F). All participants were provided with a list of potential referral sources should they have experienced any distress in taking the survey (see Appendix G). Data collected through PsychData were saved in a spreadsheet form using Microsoft Excel. The dataset was cleaned (e.g. those with excessive missing data eliminated) prior to analysis.

Analysis Plan

The independent variables in this study were the factors manipulated in the vignette: weight (low weight and high weight) and ethnicity (White, Hispanic, or Black). The dependent variables in this study were: presenting problem selected by participants (categorical variable), severity of presenting problem (scale variable), likelihood of diagnosis (scale variable), recommendation for medical follow-up (categorical variable), responses to the anorexia and bulimia subscales (scale variable) and severity of specific eating disorder behaviors (scale variable). Demographic variables for participants included ethnicity (categorical), gender (categorical variable), degree type (categorical variable), height (scale variable), weight (scale variable), years of experience (scale variable) and age (scale variable). Participants' BMI scores were calculated from their reported heights and weights.

Descriptive Statistics

Descriptive statistics were calculated for all variables, summarized in text, and presented in table form. Means, standard deviations, median values, and ranges were compiled for all continuous variables. Frequencies analyses were conducted for all categorical variables. Correlations were calculated to examine simple bivariate relationships. Continuous demographic variables that significantly correlated with dependent variables were used as covariates in further analyses. Chi Square tests were performed to examine possible relationships between categorical independent variables and dependent variables.

Hypotheses and Analyses

Based on the available literature, the following hypotheses were proposed:

<u>Hypothesis</u>	<u>Analysis</u>
1. Participants assigned to the lower weight condition will be significantly more likely to label a presenting problem as an eating disorder.	1. Chi-Square tests were performed in order to identify any significant differences in presenting problem selection between weight conditions.
2. a) Participants who receive a vignette in which L.N. is Black will be less likely to label a presenting problem as an eating disorder than those in the White ethnicity condition. b) Participants who receive a vignette in which L.N. is Hispanic will be less likely to label the presenting problem as an eating disorder than participants who are assigned to the White ethnicity condition.	2. Chi-Square tests were performed in order to identify any significant differences in presenting problem selection between ethnicity conditions.
3. a) Participants in the lower weight condition will be significantly more likely to refer L.N. for medical treatment.	3. Chi-Square tests were performed to examine whether or not the weight condition variable predicted the recommendation for medical treatment

b) Participants assigned in the White ethnicity condition will be more likely to refer L.N. for medical treatment.

4. a) Participants' ratings of severity of presenting problem will be significantly lower in the higher weight condition than in the lower weight condition

4. a) An independent samples t-test was conducted to identify statistically significant differences between weight conditions on the dependent variable measuring severity of presenting problem using an alpha of 0.05. Levene's Test was conducted to assess homogeneity of variance.

b) Participants' ratings on presenting problem severity will be significantly lower in the higher weight, Black condition as compared to all other conditions.

b) A 2 (weight: high, low) by X 3 (ethnicity: Hispanic, White, Black) ANOVA was conducted to examine possible interactions between weight and ethnicity using an alpha of 0.05. Assumptions of normality and homogeneity were assessed.

5. a) Participants' anorexia subscale mean scores will be higher in low weight condition.

5. An independent samples t-test was conducted to identify statistically significant differences between anorexia subscale mean scores using alpha of 0.05.

b) Participant's anorexia subscale mean scores will be higher in

Assumptions of normality and homogeneity were assessed.

White condition than in Black and Hispanic conditions.

b) An ANOVA was conducted to examine statistically significant differences between race conditions on anorexia subscale means scores.

6. Participants' bulimia subscale mean scores will be higher in high weight condition.

6. An independent samples t-test was conducted to identify statistically significant differences between bulimia subscale mean scores using alpha of 0.05. Assumptions of normality and homogeneity were assessed.

CHAPTER IV

RESULTS

In this chapter, preliminary analyses are presented. These results are followed by analyses of the major hypotheses of the study.

Preliminary Analyses

A sample of 409 licensed professional counselors initiated the online survey. However, 103 participants did not respond to any survey questions after being assigned a vignette and their cases were removed. As a result, 306 licensed professional counselors from five states in the United States completed the survey and participated in the study. Of the 306 cases, two were removed due to providing an inadequate number of responses to survey questions, leaving a final sample of 304 participants.

A missing data analysis was conducted to assess the extent of missing data. While the majority (90.9%) of variables contained missing responses, only a small percentage of responses (1.98%) were missing overall. Little's MCAR test (Little, 1988) was conducted to determine whether or not data was missing at random. The results revealed that the pattern of missing values in the data was not random, $\chi^2(963) = 1580.02, p < .01$. As there was a pattern of missingness, values were not imputed and pairwise deletion was used. Assessments of skewness and kurtosis indicated that most continuous variable data were normally distributed. The exceptions were several of the items asking for participants to rate symptom intensity on a scale of one to four. Due to

the low number of points in the scale and the skewed distribution of responses, these items were analyzed using nonparametric methods. The variables of height and weight contained several impossible and outlier values that were removed in order to obtain a normal distribution. Correlations between continuous dependent variables are shown in Table 1. All correlations were tested with $\alpha = .05$. Correlations were as expected between conceptually related variables.

Table 1.

Correlations for Continuous Variables

	Anorexia subscale	Bulimia subscale	Severity of <u>pres prob</u>	Binging behavior	Purging behavior	Body <u>diss</u>	Social diff	Academic/ Work diff	Excessive exercise	Anxiety	Depression
Anorexia subscale											
Bulimia subscale	.68**										
Severity of presenting Problem	.45**	.31**									
Severity of: Binging behavior	.11	.36**	.01								
Purging behavior	.16**	.28**	.05	.40**							
Body dissatisfaction	.68**	.63**	.37**	.09	.14*						
Social difficulties	.40**	.44**	.09	.21**	.17**	.35**					
Academic/work Difficulties	.32**	.35**	.16**	.10	.12*	.28**	.35**				
Weight loss	.42**	.34**	.50**	.03	.09	.42**	.14*	.16**			
Excessive exercise	.47**	.45**	.22**	.15*	.19**	.39**	.27**	.39**	.33**		
Likelihood of diagnosing:											
Anxiety	.33**	.26**	.47**	.09	.11	.34	.15*	.22**	.34**	.29**	
Depression	.30**	.27**	.40**	.18**	.08	.27	.20**	.26**	.28**	.26**	.44**
Eating disorder	.57**	.45**	.73**	.08	.13*	.40	.19**	.14*	.45**	.34**	.43**

*Correlation is significant at .05 level

**Correlation is significant at .01 level

Frequencies for participants' gender, degree type, and ethnicity are shown in Table 2. The majority of participants were female (81.6%). The majority of participants reported having master's degrees in counseling (58.9%) and counseling psychology (28.3%). The majority of participants identified as White (86.8%).

Table 2

Frequencies for Categorical Demographic Variables

Categorical variable	<i>n</i>	%
Gender		
Female	248	81.6
Male	52	17.1
Degree Type		
Masters in counseling psychology	86	28.3
Masters in social work	1	.3
Masters in counseling	179	58.9
Masters in clinical psychology	34	11.2
Ethnicity		
Black	16	5.3
Asian	3	1
White	264	86.8
Hispanic	12	3.9
Bi- or Multiracial	5	1.6

Note. Frequencies not summing to $N = 304$ reflect missing data.

Descriptive statistics for participants' age, years of experience, and BMI are shown in Table 3. Age ranged from 24 to 77 ($M = 49.1$, $SD = 12.8$), the number of years of experience ranged from 0 to 49 ($M = 15.5$, $SD = 10.1$). The "0" response in years of experience was not removed under the assumption that the corresponding participant was a newly licensed professional. BMI was calculated based on heights and weights

reported by participants. One height response and one weight response were removed due to being impossible values. Additional missing cases were due to participants declining to respond. BMI ranged from 17.4 to 46.2 ($M = 27.1$ $SD = 5.7$).

Table 3

Descriptive Statistics for Continuous Demographic Variables

Continuous variable	<i>N</i>	<i>M</i>	<i>SD</i>	Min	Max
Age in years	299	49.1	12.8	24	77
Years of experience	300	15.2	10.1	0	49
BMI	294	27.1	5.7	17.7	46.2

Note. *N* not equal to 304 reflects missing data.

Participants were randomly assigned into one of six stimulus conditions using PsychData's random assignment feature. Participants were randomly assigned to one of three race conditions and two weight conditions. Numbers of participants assigned to each condition are shown in Table 4.

Table 4

Participants by Stimulus Category

Stimulus assignment	<i>n</i>	%
Low weight White	50	16.4
High weight White	49	16.1
Low weight Black	49	16.1
High weight Black	49	16.1
Low weight Hispanic	47	15.5
High weight Hispanic	60	19.7

Analyses of Major Hypotheses

The following section will systematically review the results for each hypothesis tested.

Hypothesis One

Hypothesis one predicted that participants assigned to the low weight condition would be significantly more likely to label the presenting problem as an eating disorder. Cross-tabulations using Pearson's chi-square were conducted to examine the relationship between the weight stimulus condition and the selection of only one diagnosis from a list of possible diagnoses. There were no significant differences in diagnosis based on weight condition, $\chi^2(2) = 1.52, p = .47$. In addition, three independent samples t-tests were conducted to examine potential differences between weight conditions in how likely participants would be to diagnose L.N. with eating disorder, anxiety, and depression. As shown in Table 5, participants rated the likelihood of diagnosing L.N. with anxiety significantly higher in the low weight condition ($M = 3.3, SD = 1.1$) than the high weight stimulus group ($M = 3.0, SD = 1.0$), $p = .01, d = .29$. Ratings of likelihood of diagnosing depression did not significantly differ between the low condition ($M = 2.6, SD = .98$), and the high condition ($M = 2.5, SD = .92$), $p = .72, d = .04$. Differences in ratings of likelihood of diagnosing eating disorder were marginally significant between the low condition ($M = 3.9, SD = 1.1$), and the high condition ($M = 3.6, SD = 1.1$), $p = .06, d = .24$.

Table 5

Likelihood of Diagnosing by Weight Condition

Likelihood of diagnosing	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>d</i>
Anxiety				2.6	.01	.29
Low weight	142	3.3	1.1			
High weight	157	3.0	1.0			
Depression				.36	.72	.04
Low weight	137	2.6	.98			
High weight	153	2.5	.92			
Eating disorder				1.9	.06	.24
Low weight	146	3.9	1.1			
High weight	157	3.6	1.1			

Hypothesis Two

Hypothesis two predicted that participants who receive a vignette in which L.N. is Black or Hispanic would be less likely to label the presenting problem as an eating disorder than participants who are assigned to the White ethnicity condition. Cross-tabulations using Pearson's chi-square

were conducted to examine the relationship between the race stimulus condition and the selection of only one diagnosis from a list of possible diagnoses. There were no significant differences in diagnosis based on race condition, $\chi^2(4) = 1.5, p = .83$. Three one-way analysis of variance (ANOVA) tests were conducted to examine potential differences between race conditions in how likely participants would be to diagnose L.N. with eating disorder, anxiety, and depression. Ratings of likelihood of diagnosing an eating disorder were not significantly different between race conditions, $F(1, 301) = 1.08, p = .63, \eta^2 = .00$. Ratings of likelihood of diagnosing anxiety were not significantly different between race condition, $F(1, 297) = .17, p = .68, \eta^2 = .00$. Ratings of likelihood

of diagnosing depression were not significantly different between race condition, $F(1, 288) = 1.1, p = .54, \eta^2 = .00$.

Hypothesis Three

Hypothesis three predicted that participants in the high weight condition would be significantly less likely to refer L.N. for medical treatment, and that participants in White race condition would be more likely to refer L.N. for medical treatment. Due to small cell size, a one tailed Fisher's exact test was used to examine potential differences between weight stimulus conditions. As shown in Table 6, a significant difference was found between weight conditions, with participants assigned to the high weight condition being significantly less likely to recommend a medical follow-up for L.N. ($p < .01$), Fisher's exact test). Cross-tabulations using Pearson's chi-square were conducted to examine potential differences between race stimulus conditions. No significant differences were found between race stimulus conditions, $\chi^2(2) = 2.5, p = .29$.

Table 6

Medical Recommendation by Weight Condition

	Low weight		High weight		
	<i>n</i>	%	<i>n</i>	%	<i>p</i>
Medical follow-up					.00
Yes	144	98.6	143	90.5	
No	2	1.4	15	9.5	

Hypothesis Four

Hypothesis four predicted that participants' ratings of overall severity of presenting problem would be significantly lower in the high weight condition than in the low weight condition, and would be significantly lower in the high weight, Black condition as compared to all other conditions. A three-by-two analysis of variance test was conducted to examine potential differences in severity rating between stimulus conditions and to investigate potential interaction effects between weight and race. As shown in Table 7, severity ratings in the low weight condition were significantly higher than severity ratings in the higher weight condition but the effect size was small, $F(1, 284) = 5.13, p = .03, \eta^2 = .02$. No significant differences in severity rating were seen between race stimulus conditions, $F(2, 284) = .25, p = .08, \eta^2 < .00$. No significant interaction effects were seen between race and weight, $F(2, 284) = .46, p = .63, \eta^2 = .00$. Means and standard deviations for severity rating by weight and race condition are summarized in Table 8.

Table 7

2 x 3 ANOVA of Severity Rating Scores by Stimulus Condition

Severity rating by condition	<i>df</i>	<i>F</i>	<i>p</i>	η^2
Weight condition	1	5.1	.02	.02
Race condition	2	.25	.78	.00
Race condition * weight condition	2	.28	.46	.00

Table 8

Means and Standard Deviations for Severity Rating Scores

Weight condition	Race	<i>M</i>	<i>SD</i>
Low Weight	White	3.7	.85
	Black	3.8	.90
	Hispanic	3.6	.95
High Weight	White	3.5	.84
	Black	3.4	.98
	Hispanic	3.4	1.0

Note: Severity scores can range from 1 to 5

Hypothesis Five

Hypothesis five predicted that anorexia subscale mean scores would be higher in low weight condition. A two-by-three ANOVA test was conducted to examine potential differences in anorexia nervosa subscale mean scores between stimulus conditions and to investigate potential interaction effects between weight and race. As shown in Table 9, as expected, results indicated a significant difference between weight conditions, $F(1, 297) = 14.1, p < .01, \eta^2 = .05$. There were no significant differences by race condition F

(2, 297) = 1.06, $p > .05$. Furthermore, there were no significant interaction effects found between race and weight conditions $F(2, 297) = .23, p > .05$. Means and standard deviations of anorexia subscale mean scores for severity rating by weight and race condition are shown in Table 10.

Table 9

2x3 ANOVA of Anorexia Subscale Mean Scores by Stimulus

Anorexia subscale mean score	<i>Df</i>	<i>F</i>	<i>p</i>	η^2
Weight condition	1	14.1	.00	.05
Race condition	2	1.1	.35	.01
Race condition * weight condition	2	.23	.80	.00

Table 10

Means and Standard Deviations for Anorexia Subscale Mean Score by Stimulus

Weight	Race	<i>M</i>	<i>SD</i>
Low weight	White	2.8	.67
	Black	2.7	.65
	Hispanic	2.6	.67
High weight	White	2.4	.78
	Black	2.4	.74
	Hispanic	2.3	.74

Note: scores can range from 0 to 3

Hypothesis Six

Hypothesis six predicted that participants' ratings on bulimia subscale items would be higher in the higher weight condition. An independent samples t-test was conducted to examine differences on bulimia subscale mean scores by weight stimulus

condition. Bulimia subscale means were not significantly different between the high weight stimulus condition ($M = 2.7$, $SD = .66$) than the low weight stimulus condition ($M = 1.8$, $SD = .51$) and the high weight stimulus condition ($M = 2.0$, $SD = .60$), $p = .07$, $d = .20$, $t(300) = -1.8$, although it is noted that differences between groups were approaching significance. Summary of both subscale means by weight condition are shown in Table 11. In addition, a two-by-three ANOVA test was conducted to examine potential differences in bulimia subscale means scores between stimulus conditions and to investigate potential interaction effects between weight and race. No significant differences in bulimia subscale mean scores were seen between race stimulus conditions, $F(2, 299) = .93$, $p = .39$, $\eta^2 = .01$. No significant interaction effects were observed between race and weight, $F(2, 296) = 1.2$, $p = .31$.

Table 11

Comparison of Anorexia and Bulimia Subscale Means by Weight Stimulus

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>D</i>
Rating on anorexia subscale				3.5	.00	.46
Low weight	146	2.7	.66			
High weight	157	2.4	.75			
Rating on bulimia subscale				-1.1	.07	.20
Low weight	145	1.8	.51			
High weight	147	2.0	.60			

Note: scores can range from 0 to 3

In addition to answering the subscale items that asked for assessment of frequency, participants answered questions about the severity of several different eating disorder behaviors. As these responses were on a four-point Likert scale and some of

them were not normally distributed, they were analyzed using nonparametric methods. A Wilcoxon signed-rank test indicated that rating of the severity of L.N.'s weight loss was significantly higher in the low weight condition than in the high weight condition ($Z = -3.4, p < .01$). Ratings of severity on other symptom-related items were not significantly different by weight condition. An additional Kruskal-Wallis test performed to assess for differences in severity rating by race condition indicated no significant differences by race condition, $H(2) = .58, p = .75$. Ratings of severity on other symptom-related items were not significantly different by race condition.

Additional analyses were conducted to assess for possible relationships between factors such as age, BMI, and years of experience on survey responses. A simple linear regression was calculated to predict anorexia subscale mean scores based on participant BMI. No significant relationship was found, $F(1, 277) = 1.21, p > .05$. Similarly, no predictive relationship was found between years of experience and anorexia subscale mean scores, $F(1, 297) = .22, p > .05$. A simple linear regression was calculated to predict score on bulimia subscale based on participant BMI. No significant relationship was found, $F(1, 276) = .95, p > .05$. Similarly, no predictive relationship was found between years of experience and bulimia subscale mean scores, $F(1, 296) = .48, p > .05$. Age was also not a significant predictor of anorexia subscale mean scores, $F(1, 297) = 1.5, p > .05$, or bulimia subscale mean scores, $F(1, 296) = .15, p > .05$.

CHAPTER V

DISCUSSION

In this section a summary of the major findings of this study are presented and discussed within the context of prior literature. Implications for training, practice, and future research are examined. Strengths and limitations of the study are noted.

Summary of Major Findings

The purpose of the current study was to explore the impact of weight and race on the evaluation of eating disorder symptoms by licensed professional counselors. The researcher asked participants to estimate the frequency and severity of an array of eating disorder symptoms and to state whether or not they would recommend a medical follow up. Significant hypotheses are discussed first below, followed by a brief summary of non-significant hypotheses.

Hypothesis three predicted that participants in the high weight condition would be significantly less likely to refer L.N. for medical treatment, and that participants in White race condition would be more likely to refer L.N. for medical treatment. The weight status of the client in the vignette significantly predicted medical referral. Although the vast majority of participants recommended medical follow up, they were significantly less likely to refer in the high weight condition. No significant differences were found based on race. Hypothesis four predicted that participants' ratings of overall severity of presenting problem would be significantly lower in the high weight condition than in the

low weight condition, and would be significantly lower in the high weight, Black condition as compared to all other conditions. Results indicated that participants rated overall severity higher in the low weight condition. No significant differences were found based on race condition and no interaction was found between weight and race conditions.

Hypothesis five predicted that anorexia subscale mean scores would be higher in low weight condition. Results indicated a statistically significant difference between weight conditions. Participants assigned to the low weight condition had higher mean scale scores than participants in the high weight condition. It was also noted that differences between weight conditions on the bulimia subscale mean scores approached significance, with scores being slightly higher in the high weight condition.

Hypotheses 1 and 2 proposed that participants in the high weight condition or in Black or Hispanic conditions, respectively, would be less likely to identify L.N.'s presenting problem as an eating disorder. These hypotheses were not found to be significant based on weight or race. When looking at the likelihood of diagnosing different disorders, it appeared that participants in the low weight condition were more likely to diagnose L.N. with anxiety. However, limited conclusions may be drawn from this finding as it is based on only a single item. Hypothesis six predicted that participants' ratings on bulimia subscale items would be higher in the higher weight condition. The difference between high and low weight conditions approached significance but did not meet the cutoff.

A recurring finding in this study was that race did not appear to play a significant factor in participants' responses to the survey questions. Severity of illness and subscale means scores on both anorexia and bulimia subscales did not differ significantly between race conditions. Furthermore, race did not appear to impact whether or not participants would recommend a medical follow-up. Finally, information collected on age, years of experience, and BMI did not appear to have any significant relationship with participants' survey responses. Frequencies of therapist race, gender, and degree type were not evenly distributed enough to perform meaningful analysis.

Integration of Findings with Literature

The overall purpose of this study was to examine whether or not a client's weight status and race have the potential to impact how counselors evaluate their presenting symptoms. There is strong evidence for a weight bias among healthcare professionals in the United States (Brownell et al., 2005; Puhl & Heuer, 2009; Sabin et al., 2012; Teachmann & Brownell, 2001). Previous research has identified weight as a factor that influences characteristics ascribed to clients by clinicians. These characteristics include body image concerns (Coelho et al., 2010), overeating, (Puhl et al., 2014), and low self-esteem (Pascal & Kurpius, 2012). Furthermore, there is evidence that practitioners may give a poorer overall prognosis for overweight clients and describe overweight clients as putting in less effort than non-overweight clients (Davis-Coelho et al., 2000). Weight stigmatization is also a risk factor for the development and perpetuation of eating pathology (Sutin & Terracciano, 2013; Krug et al., 2013). Obesity is automatically

associated with overeating and binge eating pathology, while being underweight is associated with restricting behaviors. However, high weight status, restrictive eating, and rapid weight loss are not mutually exclusive. The lifetime prevalence of obesity among people in the United States with eating disorders is approximately 28.8 %. These individuals tend to exhibit more severe eating pathology and experience a longer duration of illness (Villarejo et al., 2012). For clients who start out at an overweight BMI and lose weight rapidly due to restrictive eating practices, their weight upon presentation for help may be in a normal range, but their maladaptive cognitions and medical complications are comparable to those who present underweight (Swenne, 2016). The most recent estimate of lifetime prevalence rates for anorexia nervosa and atypical anorexia nervosa are 3.64% and 1.70% respectively (Micali et al., 2017). While these rates are relatively low, it is important for counselors to be aware of how these disorders present and take them seriously when they do.

Because of negative biases that exist toward overweight people (Greenberg et al., 2003; Schvey et al., 2013) and the general stereotyped assumptions about eating disorders (Crisafulli et al., 2010; Mond et al., 2006), it was hypothesized that participants would exhibit different responses to a higher weight client than a lower weight client with all other symptoms and data presented being equal. As predicted, there were several significant differences in participants' responses to the survey based on the weight of the client in the vignette. Although the percentage of body weight lost was the same in each vignette and the number of pounds lost was greater in the higher weight vignette,

participants' mean anorexia subscale scores were significantly higher in the low weight condition and the weight loss was rated as more severe. Contrary to this study's predictions, the majority of participants identified that the client had an eating disorder regardless of the client's weight. However, for the high weight condition, the symptoms were evaluated as less frequent and severe as the symptoms in the low weight condition. This result suggests that participants may have used the client's starting and ending weights as ways to gauge how serious the presenting problem was.

Based the information presented in the clinical vignette, the client in the high weight condition would fit the criteria for atypical anorexia nervosa based on the criteria listed in the *DSM-5*, while the client in the low weight condition would fit the criteria for anorexia nervosa (APA, 2013). Both disorders have high risk of medical complications and can result in mortality. Unlike individuals with anorexia nervosa, however, individuals with atypical anorexia nervosa are often viewed as being overweight and may have been urged to lose weight at one point by others, which can perpetuate disordered eating and make treatment more difficult (Moskowitz & Weiselberg, 2017). Because adolescents with anorexia nervosa or atypical anorexia nervosa who have a history of being overweight or obese are less likely to receive inpatient medical care than adolescents who do not have a history of being overweight obese (Kennedy et al., 2017), it was predicted that participants would be less likely to recommend a medical follow-up when the client in the vignette started out overweight. The findings of this study indicate that the weight of the client may have been more of a deciding factor than the amount of

weight loss when deciding whether or not to recommend a medical follow-up. It is important to note that there are numerous health complications associated with obesity, including cardiovascular problems and type 2 diabetes (Djalina, Qorbani, Peykari, & Kelishadi, 2015; Laird et al., 2009; Sorof et al., 2004), and this may have influenced participants to view the sudden weight loss as less of a problem for the client. However, counselors are encouraged to remember that BMI is not a stand-alone indicator of health, and that rapid weight loss is potentially dangerous for their clients (Rome & Ammerman, 2003; Whitelaw et al., 2014).

While participants' mean scores on the anorexia subscale were lower in the high weight condition, their scores on the bulimia subscale were slightly higher in the high weight condition. Although the difference on the bulimia subscale only approached significance and therefore has limited interpretability, this finding supported previous evidence that overweight clients are more likely to be evaluated as overeaters and binge eaters (Puhl et al., 2014). The difference in scores is particularly interesting given that behaviors included on the bulimia subscale were not described at all in the vignette such as binge eating, overeating, and purging.

Research on the relationship between eating disorders and race and ethnicity is a small but growing area of study. There is evidence to support that rates of eating disorder prevalence may be more consistent across ethnicities than once thought (Cachelin, Striegel-Moore, & Elder, 1998; Cachelin, Veisel, Striegel-Moore, & Barzegarnazari, 2000; Lester & Petrie, 1998; Moskowitz & Weiselberg, 2017). Research also supports

that increasing rates of disordered eating and body image concerns are evident in United States Hispanic women (Blow, Taylor, Cooper, & Redfern, 2010).

However, due to social, cultural, and financial limitations, women of color may be less likely to seek eating disorder treatment (Becker et al., 2010; Cachelin et al., 2001). Although previous research on clinician racial bias and eating disorder assessment is very limited, Becker et al. (2003) found that intake clinicians were less likely to screen for eating disorders based on client ethnicity. Until this point, only one peer-reviewed study was identified that addressed the question of racially-based diagnostic bias in clients with eating disorder symptoms. Gordon et al. (2006) found that participants in her study were less likely to identify eating disorder symptoms when the client in the vignette was Black. Based on these previous findings, this study hypothesized that participants would evaluate the vignette client differently based on the described race.

Contrary to the hypotheses of this study, the vignette client's race did not have a demonstrable effect on participants' survey responses. This study found that while weight status appeared to have a noticeable effect in how participants interpreted the vignette, the described race of the client in the vignette did not have any observable effect whatsoever. Furthermore, there were no observable interactions between weight and race. Perhaps these findings are evidence of a growing awareness that, despite long standing stereotypes, anorexia nervosa and atypical anorexia nervosa are not limited to White women (Cachelin et al., 1998; Cachelin et al., 2000; Lester & Petrie, 1998; Moskowitz & Weiselberg, 2017). However, it is also possible that participants may have

reacted differently to the vignette had it been accompanied by a photograph of the client or if they had been primed in some other way to focus on the race of the client. In this case, lack of significant findings cannot be definitively interpreted as a lack of racial bias.

Despite previous findings that overweight clients were more likely to be evaluated as having depressive features than normal weight clients (Pascal & Kurpius, 2012), there were no differences by weight condition in how high participants rated their likelihood of diagnosing the client with depression. In addition, the race of the client in the vignette did not have an impact on the likelihood of diagnosing the client with depression. Participants assigned to the low weight condition, however, were more likely to have been diagnosed with anxiety. The finding suggests that participants may have associated anxious mood with low body weight. This association is interesting, given that the rate of comorbid generalized anxiety tends to be evenly distributed across eating disorder types (Kaye, Bulik, Thornton, Barbarich, & Masters, 2004; Swindburne et al., 2012).

Another surprising finding of this study was the lack of observable relationship between participant age, years of experience, and BMI and their responses. Although no specific predictions were made in this study about the impacts of years of experience, previous research has found a connection between fewer years of experience and greater bias against overweight clients (Davis-Coelho et al. 2000). To the knowledge of this author, no previous studies have examined the relationship between clinician BMI and their attitude towards overweight clients. The BMI of the participants, based on their

reported heights and weights, did not appear to significantly affect responses to the survey questions.

Implications for Training

The results of this study indicate that students attending master's programs in preparation for becoming licensed counselors will benefit from better education on the topic of eating pathology and appropriate treatment recommendations. To a great extent, restrictive dieting and rapid weight loss are normalized in the United States (St. James, et al., 2011). It is crucial that practitioners be able to recognize the signs of potentially harmful dieting behaviors in their clients and address those behaviors appropriately. Basic education on recommended daily nutrition and healthy vs. dangerous weight loss could be very helpful for graduate students who might not otherwise recognize warning signs for potential eating disorders. The topic of atypical anorexia nervosa, in particular, should be discussed in psychopathology courses in order to educate future counselors about the potential danger of anorexic behaviors in cases in which the client is not underweight.

Brownlow et al. (2015) pilot tested an online training program for healthcare professionals and found that brief training facilitated a significant decrease in stigmatized beliefs towards eating disorders and an increased confidence in ability to treat eating disorders. Implementing a brief training module for counseling students could be a valuable and relatively simple step that graduate programs could take to increase the competency of their graduates. In addition, lack of competency working with eating

disorders is associated with counselors having more negative attitudes towards their clients (Thompson-Brenner et al., 2012) and feeling less connected with them (Franko & Rolfe, 1996). Greater preparation for identifying and working with eating disorders will potentially improve the therapeutic relationship between counselors and clients who present with symptoms of disordered eating.

As an additional training consideration, the topic of weight stigma should be incorporated more universally into the multicultural education requirement in counseling graduate programs. Weight bias is evident among counseling students who have not yet entered professional practice (Pascal & Kurpius, 2012) and it makes sense to address it in the educational setting. According to the American Counseling Association (ACA) code of ethics and the APA's current Multicultural Guidelines, multicultural competency is a core component of counseling and is also therefore an essential part of counseling education (ACA, 2014; APA, 2017). While explicit biases are relatively straightforward to address in an educational setting, it is also important to address students' implicit biases. Boysen (2010) recommended using the Skilled Counselor Training Model (Crews et al., 2005) to help counseling students develop greater awareness of implicit biases. This model requires students to role play and practice skills in front of a group and receive immediate feedback. Given the widespread nature of weight stigma and the potential negative impact of microaggressions on the therapeutic relationship, it is important to help counseling students develop awareness of their biases towards overweight clients before they enter clinical practice. Supervision is also an ideal space

in which to explore counseling trainees' explicit and implicit biases (Ancis & Ladany, 2001).

Implications for Practice

There are several ways in which the results of this study may be applied in counseling settings to improve quality of therapeutic work. The findings of this study suggest that licensed professional counselors may have a weight bias in how they evaluate overweight clients with eating disorder symptoms. Contrary to the predictions of this study, the weight of the client did not appear to make a difference in whether or not participants assigned an eating disorder diagnosis. This finding is encouraging, as it indicates that the participants were able to identify that the primary presenting problem was an eating disorder regardless of weight. However, participants evaluated the presenting symptoms as less frequent and severe based on weight status, and that is a potentially dangerous bias. Rapid weight loss associated with some cases of atypical anorexia nervosa should be medically monitored to address potential complications (Whitelaw et al., 2014). It is therefore important to encourage clinicians to seek continuing education of eating disorder risks and treatment. Possible sources for this continuing education could be facilitated by inpatient eating disorder treatment facilities and university counseling centers. It is crucial for outpatient counselors to be exposed to different case profiles of clients with eating disorders in order for them to be more prepared to appropriately evaluate and refer clients as needed.

An additional topic that could benefit from increased exposure for counselors is basic information about nutrition and weight loss. Counselors are not dieticians or medical doctors, but it would be in the best interest of their clients to be well-versed as to what qualifies as rapid weight loss, what basic daily caloric needs are, and when to refer a client for a medical evaluation. Participants in this study were given information about L.N.'s "diet," which included a very low daily caloric intake and overexercise. It is imperative for clinicians to be aware of any messages they have internalized about dieting methods and weight loss. According to the most recent edition of "The U.S. Weight Loss & Diet Control Market" (Marketdata, 2017), people in the United States spend approximately 66 billion dollars annually on weight loss. There is no reason to expect counselors to be immune to the ubiquitous glorification of rapid weight loss and dieting. If a counselor is unsure about a client's nutrition and has questions, the most professional course of action is to obtain informed consent for consultation with the client's medical doctor and/or nutritionist and coordinate care as needed (APA, 2010).

The American Psychological Association (APA) *Guidelines for Psychological Practice with Girls and Women* (2007) stress that psychologists should "recognize and utilize information about oppression, privilege, and identity development as they may affect girls and women." (p. 961). Given the pervasive issue of weight stigmatization that disproportionately affects girls and women, it is important for practitioners to recognize size as a diversity factor and be aware of how weight stigmatization potentially fits in with their conceptualization of clients. Weight stigmatization is associated with

increased disordered eating behaviors, sometimes leading to a cycle of shame, negative body image, and maladaptive eating patterns (Haines et al., 2006; Major, Hunger, Bunyan, & Miller, 2014). Practitioners are encouraged to explore clients' experience with weight stigma and its relationship with reported disordered eating, as well as acknowledge the existing stigmatizing environment that overweight people currently face and the impact it has on well-being (APA, 2007).

In addition to continuing education and increased awareness, practitioners should take steps to combat implicit biases towards overweight clients that may negatively affect their therapeutic work. Practitioners are encouraged to be aware of personal biases in their interactions with clients (ACA, 2014). Implicit biases, however, are often subtle and difficult to address (Greenwald & Krieger, 2006). Such biases have the potential to impact the counselor's choices related to treatment goals and referrals to and coordination with collateral providers. Previous research on implicit biases supports that they are malleable and can be changed with practice (Blair, 2002). Barry, Elfeddali, and de Vries (2014) found that implicit negative attitudes towards overweight people could be shaped via an implicit retraining task. General strategies that are used for combating implicit bias include thinking of targets of bias in different contexts, actively challenging negative stereotypes, and changing thought patterns (Boysen, 2010). Much in the way counselors help clients change their own automatic thoughts, counselors should be encouraged to address their own thought patterns that may be negatively affecting their therapeutic work.

Strengths of Study

The present study contributes to the growing literature that identifies the existence of weight bias in the counseling profession (Coelho et al., 2000; Pascal & Kurpius, 2012; Puhl et al., 2014; Young & Powell, 1985). Where the current study moves in a new direction, however, is by examining specifically how client weight and race affect counselors' evaluation of presenting symptomatology. Prior research related to atypical anorexia nervosa, specifically, is very limited, and the majority of previous research on attitudes towards overweight clients with eating disorders have focused on BED as opposed to atypical anorexia nervosa or bulimia nervosa (Wadden et. al, 2004).

One of the strengths of this study was the finding that client weight does have some impact on whether or not a counselor recommends a medical follow-up. While a previous study found that adolescents with anorexia nervosa or atypical anorexia nervosa who have a history of being overweight or obese are less likely to receive inpatient medical care than adolescents who do not have a history of being overweight obese (Kennedy et al., 2017), no studies to date have used vignettes to systematically examine how both weight and race potentially influence whether or not counselors refer their clients for medical care. This finding has implications for improving intervention in eating disorder cases before inpatient medical care may be needed. By recognizing the need for an outpatient follow-up with a medical doctor, counselors have the opportunity to reduce medical risk and financial burden for their clients.

An additional strength of the study was the overall completion rate. For counselors who chose to read the vignette, almost all of them (90.9%) chose to complete most of the survey questions with limited missingness. Although there was a pattern in the overall missingness, once participants began the survey, most of them opted to see the questions through to the end. Perhaps this is because reading a vignette requires a certain amount of investment and once that is completed participants were engaged enough in the process to answer the questions posed about the symptoms presented.

Limitations of Study

There were several significant limitations to this study. First, the subscales taken from the Adolescent Symptom Inventory 5 (Gadow & Sprafkin, 2013) that were used to evaluate eating disorder symptomatology were not designed to be used as a stand-alone instrument. Although the reliability of the anorexia subscale was considered good at .75, the reliability of the bulimia subscale was sub optimal at .65. The small number of scale items contributed to reliability limitations. In addition, several individual items were used to gauge overall severity and severity of specific symptoms, which limited interpretability. The reason that an established eating disorder measure was not used as part of the survey was because there were no well-established clinician-rated eating disorder scales. The standard measures used in eating disorder research such as the Eating Disorder Inventory and the Eating Questionnaire are self-report and therefore inappropriate for the purposes of this study. This limitation is significant, but serves to highlight the necessity of additional work on the development of clinician-rated scales for

eating disorder symptoms. A measure completed by a clinician has the potential to provide data and perspective that may not be available in a self-report measure.

Another limitation of this study was lack of diversity in the sample in terms of gender and race. Because the vast majority of the participants were White and female, it was not possible to meaningfully compare responses between racial and gender groups. In addition, while the survey asked participants to list their professional experience in number of years, it did not include a question explicitly asking participants if they had any eating disorder specialization. The author initially planned to include this question in the survey but mistakenly omitted it in the final draft of the survey, which was a significant oversight. Inclusion of this question would have been beneficial in the analysis process. Furthermore, it would have been valuable to ask the participants how comfortable they would be to work with the client in their practice, and what level of care they thought was most appropriate for the client. These questions could have provided more insight into how the participants viewed the symptoms described in the vignette. It may also have been more beneficial to phrase questions about specific diagnoses as binary yes or no questions as opposed to using a Likert scale. It is also noted that although the overall amount of data missing was small, data was not missing completely at random. The survey did not require participants to complete all questions. It is possible that some participants were less likely to give definitive answers to some of the survey questions based on their own training or experience.

Finally, there is the additional possibility of sample selection bias and nonresponse bias. Although participants were selected at random, participants who did not have e-mails publically available were excluded because they could not be contacted. There could have been a pattern in which participants were able to be contacted, and which participants had access to equipment to complete the surveys.

Future Research

One of the greatest limitations of this study was the lack of applicable measures available for inclusion in the survey. Therefore, it will be an important next step to explore survey design for a clinician-rated measure of eating disorder symptoms. The development of a clinician rater scale would be a valuable diagnostic addition to standard self-report eating disorder measures and would also facilitate future research on clinicians' evaluation of eating disorder symptoms.

Previous research on implicit biases related to both race and weight have used photographic stimuli as opposed to written descriptions (Bessenoff & Sherman, 2000; Schwartz et al., 2003). The present study did not identify any effects of race on clinicians' ratings. It would be valuable to examine if ratings differed if a photograph was provided in addition to a text description, as participants may have a different response to visual stimuli than to a written description.

Knowing that there may be a weight bias among clinicians who encounter overweight clients with eating disorder symptoms, it will be valuable to explore further the specific beliefs clinicians have about overweight clients. For example, do they

believe weight is a protective factor? Do they believe that health risks are not as significant? It may also be useful to conduct survey research with eating disorder clients to assess their own experiences in outpatient therapy.

As this chapter recommends more thorough eating disorder education at the graduate level, it would be beneficial to conduct additional research assessing the efficacy of brief educational interventions directed specifically towards counseling students. Previous research on this topic has focused on education for medical professionals such as doctors and nurses, but the author was unable to identify any previous studies on eating disorder education for counseling or counseling psychology students. In addition, however, research on more effective education methods for general practitioners could be beneficial, as well, as general practitioners are more likely to recommend weight loss and dietary advice to obese patients with eating disorder symptoms rather than a referral for eating disorder treatment (Mitchison et al., 2017).

The results of this study supports that the weight status of a client influences how symptoms are evaluated, but this study did not attempt to gather any information on participant attitude towards the vignette clients. It could be useful to look into specific attitudes endorsed by counselors and whether or not those attitudes have any relationships with their evaluation of the data and their recommendations. For example, researchers could ask participants to identify if they would feel positively or negatively about working with L.N. as a client, or asking how engaged they think L.N. would be in the therapy process.

One of the findings of the study was that differences between weight conditions on the bulimia subscale mean scores approached significance. Unlike the anorexia subscale means scores, which were higher in the low weight group, the bulimia subscale means scores were higher in the high weight group, suggesting that participants may have associated the higher weight of the client with bulimic behaviors such as binge eating. Limited conclusions can be drawn from this difference, but it does suggest that further investigation is warranted into ways in which counselors might stereotype clients with eating disorders based on body size and weight.

The present study chose to focus on women, as eating disorders disproportionately affect women (APA, 2013). However, there is a considerable gap in the literature related to men with eating pathology, particularly in the area of assessment and referral. Furthermore, eating disorders in men are estimated to be significantly underdiagnosed and underreported (Strother, Lemberg, Stanford, & Tuberville, 2012). Examining the impact of gender on symptom assessment could be a beneficial topic for further study.

Conclusion

Eating disorders present a unique challenge for counselors working in private practice (Lilienfeld et. al, 2013). Clients with eating disorders are often at a higher risk for medical complications, and it can be difficult for counselors to evaluate when medical intervention is necessary. A critical part of this clinical judgment is not making automatic assumptions about medical risk based on the weight or BMI of the client.

While there are a number of health problems that can arise from low body weight, rapid weight loss can trigger numerous medical complications regardless of whether or not the client is underweight. Given the significant portion of the U.S. population that is clinically overweight, it is likely that counselors will work with overweight clients. Furthermore, given that weight stigma is a risk factor for eating pathology, it is necessary for counselors to be able to recognize and evaluate the severity of eating disorder symptoms when they are reported by a client, regardless of the client's current weight.

An additional factor to consider is the client's race. Although once thought to be limited to White western women (Gordon et al., 2002), anorexia nervosa and atypical anorexia nervosa have been found to exist across races and ethnicities (Moskowitz & Weiselberg, 2017). Limited research to date has been conducted on how race might impact eating disorder assessment and referral. This gap is concerning, given the large number of female adolescents and adult women of color in the United States struggling with eating pathology.

The present study provides hope in regards to some research questions, and room for growth in other areas. Results indicated that participants were able to recognize the cluster of symptoms presented in the vignette as an eating disorder regardless of the client's weight or race. Furthermore, participants did not appear to be influenced by the described race of the client in regards to any of their clinical decisions. However, the client's weight appeared to impact their evaluation of how severe the presenting problem was, and appeared to play a significant role in whether or not participants recommended a

medical follow-up for the client. These results suggest that additional education and training could be useful in helping improve counselors' competency.

REFERENCES

- Ackard, D. M., Richter, S., Frisch, M. J., Mangham, D., & Cronmeyer, C. L. (2013). Eating disorder treatment among women forty and older: increases in prevalence over time and comparisons to young adult patients. *Journal of psychosomatic research*, 74, 175-178. doi: 10.1016/j.jpsychores.2012.10.014
- Aboraya, A., Rankin, E., France, C., El-Missiry, A., & Collin, J. (2006). The reliability of psychiatric diagnosis revisited. *Psychiatry*, 3, 41-50. Retrieved from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2990547/>
- Alegria, M., Woo, M., Cao, Z., Torres, M., Meng, X., & Striegel-Moore, R. (2007). Prevalence and correlates of eating disorders in Latinos in the U.S. *International Journal of Eating Disorders*, 40, 15-21. doi: 10.1002/eat.20406
- American Counseling Association. (2014). ACA code of ethics. Alexandria, VA. Retrieved from: <https://www.counseling.org/resources/aca-code-of-ethics.pdf>
- American Medical Association (2000, September). Dieting and the development of eating disorders in overweight and obese adults. *National Task Force on the Prevention and Treatment of Obesity*. Retrieved from: <https://sites.oxymed.edu/clint/physio/article/DietingandtheDevelopmentofEatingDisordersinOverweightandObeseAdults.pdf>
- American Psychological Association. (2017). Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality. Retrieved from:

<http://www.apa.org/about/policy/multicultural-guidelines.pdf>

American Psychological Association, (2007). Guidelines for psychological practice with girls and women. *American Psychologist*, 62, 949-979. doi: 10.1037/0003066X.62.9.949

American Psychiatric Association (2010). *Practice guideline for treatment of patients with eating disorders*. Retrieved from: http://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/eatingdisorders.pdf

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Amici, C.J. (2003). Effects of client body size on the attitudes and assessment of pathology by female and male mental health professionals (dissertation). Fuller Theological Seminary, School of Psychology, Pasadena, California

Amy, N. K, Aalborg A., Lyons P., & Keranen L. (2006). Barriers to routine gynecological cancer screening for White and African American obese women. *International Journal of Obesity*, 30:147–155. doi: <http://dx.doi.org/10.1016/j.amepre>.

Ancis, J. R. J. & Ladany, N. (2001). A multicultural framework for counselor supervision. In L. J. Bradley & N. Ladany (Eds.), *Counselor supervision: Principles, process and practice* (pp. 63-90). Philadelphia, PA: Brunner-Routledge.

- Aronowitz, R. (2008). Framing disease: An underappreciated mechanism for the social patterning of health. *Social Science & Medicine*, 67, 1–9. doi: 10.1016/j.socscimed.2008.02.017
- Atwood, N. (1982). Professional prejudice and the psychotic client. *Social Work*, 27, 172–177. doi: 10.1093/sw/27.2.172
- Bannon, K. L., Hunter-Reel, D., Wilson, G. T., Karlin, R. A. (2009). The effects of causal beliefs and binge eating on the stigmatization of obesity. *International Journal of Eating Disorders*, 42 (2), 118–124. doi: 10.1002/eat.20588.
- Bardone-Cone, A. M., Sturm, K., Lawson, M., Robinson, P. D., & Smith, R. (2010). Perfectionism across stages of recovery from eating disorders. *International Journal of Eating Disorders*, 43, 139–148. doi: 10.1002/eat.20674
- Barry, T. R., Elfeddali, I., & de Vries, H. (2014). Changing fit and fat bias using an implicit retraining task. *Psychology & Health*, 29, 796–812. doi: 10.1080/08870446.2014.885024
- Baugh, E., Mullis, R., Mullis, A., Hicks, M., & Peterson, G. (2010). Ethnic identity and body image among Black and White college females. *Journal of American College Health*, 59, 105–109. doi: 10.1080/07448481.2010.483713
- 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. (2003). Ethnicity and differential access to care for eating disorder symptoms. *International Journal of Eating Disorders*, 33(2), 205–212. doi: 10.1002/eat.10129
- Berg, K. C., Peterson, C. B., & Frazier, P. (2012). Assessment of eating disorders: A guide for professional counselors. *Journal of Counseling and Development*, 90, 262-269. doi: 10.1002/j.1556-6676.2012.00033.x
- Bessenoff, G. R., & Sherman, J. W. (2000). Automatic and controlled components of prejudice toward fat people: Evaluation versus stereotype activation. *Social Cognition*, 18, 329-353. doi: 10.1521/soco.2000.18.4.329
- Black, M. H., Zhou, H., Takayanagi, M., Jacobsen, S. J., & Koebnick, C. (2003). Increase asthma risk and asthma related health care complications associated with childhood obesity. *American Journal of Epidemiology*, 178, 1120-1128. doi: 10.1093/aje/kwt093
- Blair, I. V. (2002). The malleability of automatic stereotypes and prejudice. *Personality and Social Psychology Review*, 6, 242-261. Retrieved from http://journals.sagepub.com.ezp.twu.edu/doi/abs/10.1207/S15327957PSPR0603_8
- Blair, I. V., Steiner, J.F., Fairclough, D. L., Hanratty, R., Price, D. W., Hirsh, L. A., Bronsert, M., Karimkhani, E., Magid, D. J., & Havranek, E. P. (2013). Clinicians' implicit ethnic/racial bias and perceptions of care among Black and Latino patients. *Annals of Family Medicine*, 11, 43-52. doi: 10.1370/afm.1442
- Bleich, S. N., Gudzone, K. A., Bennett, W. L., Jarlenski, M. P., Cooper, L. A. (2013).

- How does physician BMI impact patient trust and perceived stigma? *Preventative Medicine*, 52, 120-124. doi: 10.1016/j.ypmed.2013.05.005
- Blow, J. A., Taylor, T., Cooper, T. V. & Redfern, C. K. (2010). Correlates of weight control in a Hispanic college student sample. *Eating Behaviors*, 11(1), 6-10. doi: 10.1016/j.eatbeh.2009.08.001
- Boulé, C. J. & McSherry, J. A. (2002). Patients with eating disorders: How well are family physicians managing them? *Canadian Family Physician*, 48, 1807-1813. doi: 10.1007/s10389-005-0102-5
- Boysen, G. (2010). Integrating implicit bias into counselor education. *Counselor Education and Supervision*, 49(4), 210-227. Retrieved from <http://ezproxy.twu.edu:2119/ehost/detail/detail?vid=0&sid=ca4335e4-dc4b-4e2f-89befeddda9fd12c%40sessionmgr102&bdata=JnNpdGU9ZWwhvc3QtbGl2ZQ%3d%3d#db=pbh&AN=51826875>
- Brancanti, F. L., Kao, L., Folsom, A., Watson, R. L., & Szklo, M. (2000). Incidence of type of 2 diabetes in African American and White Adults. *Journal of the American Medical Association*, 283, 2253-2259. doi:10.1001/jama.283.17.2253
- Breitkopf, C. R., Littleton, H., & Berenson, A. (2007). Body image: A study in a tri-ethnic sample of low-income women. *Sex Roles*, 56, 373–380. doi: 10.1007/s11199-006-9177-x
- Brewerton, T. D., Lydiard, R. B., Herzog, D. B., Brotman, O'Neil, A. W., Patrick, M., & Ballenger, J. C. (1995). Comorbidity of Axis I Psychiatric Disorders in

- bulimia nervosa. *Journal of Clinical Psychiatry*. 56, 77-80.
- Brewis, A. A. (2014). Stigma and the perpetuation of obesity. *Social Science and Medicine*, 118, 152-158. doi: 10.1016/j.socscimed.2014.08.003.
- Brownlow, R. S., Maguire, S., O'Dell, A., Dias-da-Costa, C., Touyz, S., and Russell, J. (2015). Evaluation of an online training program in eating disorders for health professionals in Australia. *Journal of Eating Disorders*, 3(37), doi: 10.1186/s40337-015-0078-7
- Brownell K. D. (2005). The chronicling of obesity: growing awareness of its social, economic, and political contexts. *Journal of Health Politics, Policy and Law*, 30 955-64.
- Brownell, K. D., Puhl, R. M., Schwartz, M. B., & Rudd, L. (2005). *Weight bias: Nature, consequences, and remedies*. New York: The Guildford Press.
- Bulik, C. M. Sullivan, P. F., Carter, F. A. & Joyce, P. R. (1996). Lifetime Anxiety Disorders in Women with bulimia nervosa. *Comprehensive Psychiatry*. 37, 368-74. doi: [http://dx.doi.org/10.1016/S0306-4603\(96\)00053-6](http://dx.doi.org/10.1016/S0306-4603(96)00053-6)
- Burke, M. A., & Heiland, F. W. (2011). Explaining gender-specific racial differences in obesity using biased self-reports of food intake and physical activity. *Working Papers*, 11, retrieved from: <https://www.bostonfed.org/economic/wp/wp2011/wp1102.pdf>
- Butryn, M. L., Juarascio, A., & Lowe, M. R. (2011). The relation of weight suppression and BMI to bulimic symptoms. *International Journal of Eating Disorders*, 44 (7), 612-617. doi: 10.1002/eat.20881
- Cachelin, F. M., Striegel-Moore, R. H., & Elder, K. (1998). Realistic weight perception

- and body size assessment in a racially-diverse community sample of dieters.
Obesity Research, 6, 62–68. doi: 10.1002/j.1550-8528.1998.tb00316.x
- Cachelin, F. M., Veisel, C., Striegel-Moore, R. H., & Barzegarnazari, E. (2000).
Disordered eating, acculturation, and treatment seeking in a community sample of
Hispanic, Asian, Black, and White women. *Psychology of Women Quarterly*, 24,
156–165. doi: 10.1111/j.1471-6402.2000.tb00206.x
- Cachelin, F. M., Rebek, 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
- Candib, L. M. (2007). Obesity and diabetes in vulnerable populations: Reflection on
proximal and distal causes. *Annals of Family Medicine*, 5(6), 547–556. doi:
10.1370/afm.754
- Carr, D. & Friedman, M. A. (2005). Is obesity stigmatizing? Body weight, perceived
discrimination, and psychological well-being in the United States. *Journal of
Health and Social Behavior*, 46, 244-259. doi: 10.1177/002214650504600303
- Carroll, J. M., Touyz, S. W., & Beaumont, J. V. (1996). Specific comorbidity between
bulimia nervosa and personality disorders. *International Journal of Eating
Disorders*, 19, 159-170. doi: 10.1002/(SICI)1098-108X(199603)19:2<159::AID-
EAT6>3.0.CO;2-Moi
- Cecil, J. E., Watt, P., Murrie, I. S. L., Wrieden, W., Wallis, D. J., Hetherington, M. M.,
Bolton-Smith, C., & Palmer, C. (2005). Childhood obesity and socioeconomic

- status: A novel role for height growth limitation. *International Journal of Obesity*, 29, 1199–1203. doi: 10.1093/ije/30.5.1129.
- Centers for Disease Control and Prevention (2012). Body measurements. Retrieved from: <http://www.cdc.gov/nchs/fastats/body-measurements.htm>
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614 – 625. doi: 10.1037/0003-066X.59.7.614.
- Cowen, P.J., Anderson, I.M., & Fairburn, C.G. (1992). Neurochemical effects of dieting: Relevance to changes in eating and affective disorders. In G.H. Anderson & S.H. Kennedy (Eds.), *The biology of feast and famine: Relevance to eating disorders* (pp. 269–284). San Diego, CA: Academic Press
- Cramer, P., & Steinwert, T. (1998). Thin is good, fat is bad: How early does it begin? *Journal of Applied Developmental Psychology*, 19, 429-451. doi: 10.1016/S0193-3973(99)80049-5
- Crandall, C. S. (1994). Prejudice against fat people: Ideology and self-interest. *Journal of Personality and Social Psychology*, 66, 882-894. doi:10.1037/0022-3514.66.5.882
- Crandall, C. S., & Eshleman, A. (2003). The justification-suppression model of experienced and expressed prejudice. *Psychological Bulletin*, 129, 414-446. doi: 10.1037/0033-2909.129.3.414. 414
- Crews, J., Smith, M., Smaby, M., Maddux, C, Torres-Rivera, E., Casey, J., & Urbani, S. (2005). Self-monitoring and counseling skills: Skills-based versus interpersonal process recall training. *Journal of Counseling & Development*, 83,

78-85. doi: 0.1002/j.1556-6678.2005.tb00582.x

Crisafulli, M. A., Thompson-Brenner, H., Franko, D. L., Eddy, K. T., Herzog D. B..

(2010). Stigmatizing of anorexia nervosa: Characteristics and response to intervention. *Journal of Social and Clinical Psychology*, 29(7), 756–770. doi: 10.1521/jscp.2010.29.7.756

Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000).

Stigmatisation of people with mental illnesses. *British Journal of Psychiatry*, 177, 4-7. doi: 10.1192/bjp.177.1.4

Crocker, J., Cornwell, B., & Major, B. (1993). The stigma of overweight: Affective

consequences of attributional ambiguity. *Journal of Personality and Social Psychology* 64, 60-70. doi: 10.1016/j.jretai.2014.03.003

Curran, L., Waller, G., & Schmidt, U. (2009). Primary care physicians'

knowledge of and attitudes toward the eating disorders: Do they affect clinical actions? *International Journal of Eating Disorders*, 42(5), 453 – 458. doi: 10.1002/eat.20636

Davis-Coelho, K., Waltz, J., & Davis-Coelho, B. (2000). Awareness and prevention of

bias against fat clients in psychotherapy. *Professional Psychology: Research and Practice*, 31, 682–684. doi:10.1037/0735-7028.31.6.682

Delucia-Waack, J. L. (1999). Supervision for counselors working with eating disorders

groups Countertransference issues related to body image, food, and weight. *Journal of Counseling and Development*, 77, 379-388. doi:10.1002/j.1556-6676.1999.tb02463.x

- Djalinia, S., Qorbani, M., Peykari, N., Kelishadi, R. (2015). Health impacts of obesity. *Pakistan Journal of Medical Sciences*, 31(1), 239-242.
doi:10.12669/pjms.311.7033.
- Drenick, E. J., G. S. Bale, F. Seltzer, & Johnson, D.G. (1980). Excessive mortality and causes of death in morbidly obese men. *Journal of the American Medical Association*, 243, 443-445. doi: 10.1001/jama.1980.03300310031018.
- Easter, M. M. (2012). Not my fault: Genetics, stigma, and personal responsibility for women with eating disorders. *Social Science and Medicine*. 75, 1408-1416. doi: 10.1016/j.socscimed.2012.05.042
- Ebner, D., Latner, J., & O'Brien, K. (2011), Just world beliefs, causal beliefs, and acquaintance: Associations with stigma towards eating disorders and obesity, *Personality and Individual Differences*, 51, 618-622.
doi:10.1016/j.paid.2011.05.029
- Elias, N., & Scotson, J. L. (1994). *Theory, Culture & Society: The established and the outsiders: A sociological enquiry into community problems*. (2nd ed.). London: SAGE Publications Ltd. doi: 10.4135/9781446222126
- Elran-Barak, R., Sztainer, M., Goldschmidt, A.B., Crow, S.J., Peterson, C. B., Hill, L. L., Crosby, R. D., Powers, P., Mitchell, J. E., & LeGrange, D. (2015). Dietary restrictions and binge eating in anorexia nervosa, bulimia nervosa, and binge eating disorder: Trans-diagnostic examination of the restraint model. *Eating Behaviors*, 18, 192-196. doi: 10.1016/j.eatbeh.2015.05.012

- Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorder psychopathology: interview or self-report questionnaire? *International Journal of Eating Disorders*, 16, 363-370. Retrieved from <https://www.sciencedirect.com.ezp.twu.edu/science/article/pii/S0005796703001992>
- Fairweather-Schmidt, K., & Wade, T. D. (2014). DSM-5 eating disorders and other specified eating and feeding disorders: Is there a meaningful differentiation? *International Journal of Eating Disorders* 47 (5), 524-533. doi: 10.1002/eat.22257
- Faith, M. S., Leone, M. A., Ayers, T. S., Moonseong, H., & Pietrobelli, A. (2002). Weight criticism during physical activity, coping skills, and reported physical activity in children. *Pediatrics*, 110, 205-219. doi: 10.1111/j.2047-6310.2012.00048
- Feingold, A. (1992). Good-looking people are not what we think. *Psychological Bulletin*, 111, 304-341. doi: 10.1037/0033-2909.111.2.304
- Ferdinand, K. C. (2008). Cardiovascular disease in Blacks: Can we stop the clock? *Journal of Clinical Hypertension*, 10, 382-389. doi: 10.1111/j.1751-7176.2008.07918.x
- Flegal, K. M., Carroll, M. D., Ogden, C. L., & Curtin, L. R. (2010). Prevalence and trends in obesity among U.S. adults, 1999-2008. *Journal of the American Medical Association*, 303(3), 235-241. doi:10.1001/jama.2009.2014
- Flegal, K. M., Williamson, P. F., Pamuk, E. R., & Rosenberg, H. M. (2004). Estimating

- deaths attributable to obesity in the United States. *American Journal of Public Health*, 94, 1486-9. doi: 10.2105/AJPH.94.9.1486
- Foster, G. D., Wadden, T. A., Makris, A. P., Davison, D., Sanderson, R. S., Allison, D. B., & Kessler, A. (2003). Primary care physicians' attitudes about obesity and its treatment. *Obesity Research*, 11, 1168-1177. doi: 10.1038/oby.2003.161
- Franko, D.L., & Rolfe, S. (1996). Countertransference in the treatment of patients with eating disorders. *Psychiatry Interpersonal and Biological Processes*, 59(1), 108-116, doi: 10.1002/eat.20650.
- Franko, D. L., Becker, A. E., Thomas, J. J., & Herzog, D. B. (2007). Cross-ethnic differences in eating disorder symptoms and related distress. *International Journal of Eating Disorders*, 40(2), 156-64. doi: 10.1002/eat.20341
- Friedman, K. E., Reichmann, S. K., Costanzo, P. R., Zelli, A., Ashmore, J. A., & Musante, G. J. (2005). Weight stigmatization and ideological beliefs: Relation to psychological functioning in obese adults. *Obesity Research*, 13, 907-916.
- Gadow, K. D., & Sprafkin, J. (2013). *Child and Adolescent Symptom Inventory 5*. NY: Checkmate Plus.
- Garner, D. M. (2004). *Eating Disorder Inventory-3. Professional Manual*. Lutz, FL: Psychological Assessment Resources, Inc.
- Garner, D. M., & Keiper, C. D. (2010). "Anorexia and Bulimia," *Handbook of clinical psychology competencies* (1429-1460). New York: Springer
- Garner, D. M., Rosenvinge, J. H., Friberg, O., & Rokkedal, K. (2004). Validating the

- Eating Disorder Inventory-3: A comparison between 561 female eating disorders patients and 878 females in the general population. *Journal of Psychopathology Behavioral Assessment*, 33(1), 101-110. doi: 10.1007/s10862-010-9207-4.
- Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, NJ: Prentice-Hall.
- Gordon, K. H., Perez, M., & Joiner Jr., T. E. (2002). The impact of racial stereotypes on eating disorder recognition. *International Journal Eating Disorders*, 32, 219–224.
- Gordon K. H., Brattole M. M., Wingate L. R., & Joiner T. E. (2006). The impact of client race on clinician detection of eating disorders. *Behavioral Therapy*. 37:319–325
- 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(2), 135-143. doi: 0.1037/a0018671
- Greenberg, B. S., Eastin, M., Hofschire, L., Lachlan, K., & Brownell, K. D. (2003). Portrayals of overweight and obese individuals on commercial television. *American Journal of Public Health*, 93, 1342–1348. doi: 10.2105/AJPH.93.8.1342
- Greener, J., Douglas, F., van Teijlingen E. (2010). More of the same? Conflicting perspectives of obesity causation and intervention among health professionals and policy makers. *Social Science Medicine*, 70(7), 1042-9. doi: 10.1016/j.socscimed.2009.11.017

- Greenleaf, C., Petrie, T. A., & Martin, S. B. (2014). Relationship of weight-based teasing and adolescents' psychological well-being and physical health. *Journal of School Health, 84*, 49-55, doi: 10.1111/josh.12118
- Greenwald, A. G. & Krieger, L. H. (2006). Implicit bias: Scientific foundations. *California Law Review, 94*(4), 945-970. doi: 10.15779/Z38GH7F
- Griffiths, S., Mond, J. M., Murray, S. B., Touyz, S. (2015). The prevalence and adverse associations of stigmatization in people with eating disorders. *International Journal of Eating Disorders, 48*(6), 767-774. doi: 10.1002/eat.22353
- Guh D.P., Zhang W., Bansback N., Amarsi Z., Birmingham C.L., & Anis A.H. (2009). The incidence of co-morbidities related to obesity and overweight: A systematic review and meta-analysis. *BMC Public Health, 9*(88), 86-92. doi:10.1186/1471-2458-9-88
- Gyurkovics, E., Tihanyi, B., Szijarto, A., Kaliszky, P., Temesi, B., & Kupcsulik, P. (2006). Fatal outcome from acute gastric dilation after an eating binge. *International Journal of Eating Disorders, 39* (7), 602-605. doi: 10.1002/eat.20281.
- Hackler, A. H., & Vogel, D. L., & Wade, N. G.(2010). Attitudes towards seeking professional help for an eating disorder: The role of stigma and anticipated outcomes. *Journal of Counseling and Development, 88*, 424-431. doi: 10.1002/j.15566678.2010.tb00042.x
- Haines, J., Neumark-Sztainer, D., Eisenberg, M. E., & Hannan, P. J. (2006). Weight

- teasing and disordered eating behaviors in adolescents: Longitudinal findings from the project EAT (Eating Among Teens). *Pediatrics*, 117(2), 209-215. doi: 10.1542/peds.2005-1242
- Halfon, S. M. (2015). Pediatric adverse childhood experiences: Implications for life course health trajectories. *Academic Pediatrics*, 15(5), 467-468. doi: 10.1016/j.acap.2015.07.004
- Halmi, K. A., Eckert, E., Marchi, P., Sampugnaro, V., Apple, R., & Cohen, J. (1991). Comorbidity of psychiatric diagnoses in anorexia nervosa. *Archives of General Psychiatry*, 48, 712–718. doi: 10.1001/archpsyc.1991.01810320036006
- Harris, K. M., Perreira, K., & Lee, D. (2009). Obesity in the transition to adulthood: predictions across race-ethnicity, immigrant generation, and sex. *Archives of Pediatric and Adolescent Medicine*, 163(11):1022-8. doi: 10.1001/archpediatrics.2009.182
- Hart, E.A., Sbrocco, T., Carter, M. M. (2016). Ethnic identity and implicit anti-fat bias: Differences between African American and White women. *Ethnicity and Disease*, 26(1), 69-76. doi: 10.18865/ed.26.1.69
- Hebl, M., & Heatherton, T. F. (1998). The stigma of obesity: The differences are black and white. *Personality and Social Psychology Bulletin*, 24, 417–426. doi:10.1038/ijo.2008.22
- Henriques, G., & Calhoun, L. (1996). Ethnic differences in women's body satisfaction: An experimental investigation. *Journal of Social Psychology*, 136(6), 689-97. doi: 10.1002/nur.4770160503

- Hilbert, A., Braehler, E., Haeuser, W., & Zenger, M. (2014). Weight bias internalization, core self evaluation, and health in overweight and obese persons. *Obesity*, 22(1), 79-85. doi: 10.1002/oby.20561
- Jay, M., Kalet, A., Ark, T., McMacken, M., Messito, M. J., Richter, R., Schlair, S., Sherman, S., Zabar, S., & Gillespie, C. (2009). Physicians' attitudes about obesity and their associations with competency and specialty: A cross-sectional study. *BMC Health Services Research*, 9, 1-11. doi: 10.1186/1472-6963-9-106.
- Johnston, D. W., & Lee, W. S. (2011). Explaining the female Black-White obesity gap: A decomposition analysis of proximal causes. *Demography*, 48, doi: 10.1007/s13524-011-0064-x
- Jutel, A. (2005). Weighting health: The moral burden of obesity. *Social Semiotics*, 15(2), 115-125. doi: 10.1080/10350330500154717
- Juarascio, A. S., Forman, E. M., Timko, C. A., Herbert, J. D., Butryn, M., Lowe, M. (2011). Implicit internalization of the thin ideal as predictor of increases in weight, body dissatisfaction, and disordered eating. *Eating behaviors*. 12, 207-213. doi: 10.1016/j.eatbeh.2011.04.004
- Kavey R., Simons-Morton D. G., & de Jesus J. (2011). Expert panel on integrated guidelines for cardiovascular health and risk reduction in children and adolescents. Retrieved from: http://www.nhlbi.nih.gov/files/docs/guidelines/peds_guidelines_full.pdf

- Kaye, W. H., Bulik, C. M., Thornton, L., Barbarich, N., & Masters, K. (2004). Comorbidity of anxiety disorders with anorexia and bulimia. *American Journal of Psychiatry*, 161, 2215-2221. doi: 10.1176/appi.ajp.161.12.2215
- Kennedy, G. A., Forman, S. F., Woods, E., Hergenroeder, A. C., Mammel, K. A., Fisher, M., Ornstein, R. M., Callahan, S. T., Golden, N. H., Kapphahn, C. J., Garber, A. K., Rome, E. S., Richmond, T. K. (2017). History of overweight/obesity as predictor of care received at 1year follow-up in adolescents with anorexia nervosa or atypical anorexia nervosa. *Journal of Adolescent Health*, 60(6), 674-679. doi: 10.1016/j.jadohealth.2017.01.001
- Kilpatrick, M., Ohannessian, C., Bartholomew, J. B. (1999). Adolescent weight management and perceptions: An analysis of the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 69(4), 148-152. doi: 10.1111/j.1746-1561.1999.tb04173.x.
- King, E. B., Shapiro, J., Hebl M. R., Singletary, S., & Turner, S. (2006). The stigma of obesity in customer service: A mechanism of remediation and bottom-line consequences of interpersonal discrimination. *Journal of Applied Psychology*, 91, 579-593. doi: 0.1037/0021-9010.91.3.579
- Krug I., Villarejo C., Jimenez-Murcia S., Perpina C., Vilarrasa N., Granero R. (2013) Eating-related environmental factors in under- weight eating disorders and obesity: are there common vulnerabilities during childhood and early adolescence? *European Eating Disorders Review*, 21(3):202–8. doi:

10.1002/erv.2204

Laird, B. C., Zubin, A., Bansback, N., Wei, Z., Guh, D. P., Aslam, A. H. (2009). The incidence of co-morbidities related to obesity and overweight: A systematic review and meta-analysis. *BMC Public Health*, 9(1), 88. doi: 10.1186/1471-2458-9-88

Latner, J. D., O'Brien, K.S., Durso, L. E., Brinkman, L. A., & MacDonald, T. (2008). Weighing obesity stigma: The relative strength of different forms of bias. *International Journal of Obesity* (2005), 32, 1145-1152. doi: 10.1038/ijo.2008.53

Lebow, J., Sim, L. A. & Kransdorf, L. N. (2015). Prevalence of a history of overweight and obesity in adolescents with restrictive eating disorders. *Journal of Adolescent Health*, 56(1), 19-24, doi: 10.1016/j.jadohealth.2014.06.005

Lester, R., & Petrie, T. A. (1998). Prevalence of disordered eating behaviors and bulimia nervosa in a sample of Mexican American female college students. *Journal of Multicultural Counseling and Development*, 26, 157–165. doi: 10.1002/j.2161-1912.1998.tb00195.x

Lewis, S., Thomas, S. L., Blood, R., Castle, D. J., Hyde, J., & Komesaroff, P. A. (2011). How do obese individuals perceive and respond to the different types of obesity stigma that they encounter in their daily lives? A qualitative study. *Social Science & Medicine*, 73, 1349-1356. doi: 10.1016/j.socscimed.2011.08.021

Li Cavoli, G., Mule, G., & Rotolo, U. (2011). Renal involvement in psychological eating disorders, *Nephron Clinical Practice*, 119, 338-341. doi: 10.1159/000333798

- Lilenfeld, G., Wonderlich, S., Riso, L.P., Crosby, R., & Mitchell, J. (2006). Eating disorders and personality: A methodological and empirical review. *Clinical Psychology Review*. 26(3), 299-320. doi: 10.1016/j.cpr.2005.10.003
- Lilenfeld L. R., Stein D., Bulik C. M., Strober M., Plotnicov K., Pollice C., Roa, R., Merikanga, K. R., Nagy, L., & Kaye, W. H. (2000). Personality traits among currently eating disordered, recovered and never ill first-degree female relatives of bulimic and control women. *Psychiatric Medicine*. 30, 1399–1410. Retrieved from http://eatingdisorders.ucsd.edu/research/pdf_papers/2000/lilenfeld2000personality.pdf
- Lilienfeld, S. O., Ritschel, L. A., Lynn, S. J., Brown, A. P., Cautin, R. L., Latzman, R. D. (2013). The research-practice gap: Bridging the schism between eating disorder researchers and practitioners. *International Journal of Eating Disorders*, 46, 386-394. doi: 10.1002/eat.22090
- Little, R. J. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, 83(404), 1198-1202. doi: 10.2307/2290157
- Luce, K. H., & Crowther, J. H. (1999). The reliability of the eating disorder examination: Self-report questionnaire version. *International Journal of Eating Disorders*, 25(3), 349-351. doi: 10.1002/(SICI)1098-108X(199904)25:3<349::AID-EAT15>3.0.CO;2-M
- Lynagh, M., Cliff, K., & Morgan, P. J. (2015). Attitudes and beliefs of nonspecialist

- and specialist trainee health and physical education teachers toward obese children: Evidence for anti-fat bias. *Journal of School Health*, 85(9), 595-603. doi: 10.1111/josh.12287
- MacCann, C., Roberts, R. D. (2013). Just as smart but not as successful: Obese students obtain lower grades but equivalent test scores to nonobese students. *International Journal of Obesity*, 37, 40-46. doi: 10.1038/ijo.2012.47.
- Mahr, F., Farahmand, P., Bixler, E. O., Domen, R. E., Moser, E. M., Nadeem, T., Levine, R. L., & Halmi, K. A. (2014). A national survey of eating disorder training. *International Journal of Eating Disorders*, 48, 443-445. doi: 10.1002/eat.22335
- Maier, A., Ernst, J. P., Muller, S., Gross, D., Zepf, F. D., Herpertz-Dahlmann, B., & Hagenah, U., (2014). Self-perceived stigmatization in female patients with anorexia nervosa: results from an explorative retrospective pilot study of adolescents. *Psychopathology*, 47 (2), 127-132. doi: 10.1159/000350505
- Major, B., Hunger J. M., Bunyan, D. P. & Miller, C. P. (2014). The ironic effects of weight stigma. *Journal of Experimental Social Psychology*, 51, 74-80. doi: 10.1016/j.jesp.2013.11.009
- Manson, J.E., Willett, W. C., Stampfer, M. J., Colditz, G. A., Hunter, D. J., Hankinson, S. E., Hennekens, C. H., & Speizer, F. E. (1995). Body weight and mortality among women. *New England Journal of Medicine*, 333, 677-85.
- Marlowe, C. M., Schneider, S. L. & Nelson, C. E. (1996). Gender and attractiveness biases in hiring decisions: Are more experienced managers less biased? *Journal of*

Applied Psychology, 81(1), 11–21. doi: 10.1056/NEJM199509143331101

- Marques, L., Alegria, M., Becker, A.E., Chen, C., Fang, A., Chosak, A., & Belo Diniz, J. (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(5), 412-420. doi: 10.1002/eat.20787
- Martin, J. K., Pescosolido, B. A., & Tuch, S. A. (2000). Of fear and loathing: The role of ‘disturbing behavior,’ labels, and causal attributions in shaping attitudes towards people with mental illness. *Journal of Health and Social Behavior*, 41(2), 208-223. doi: 0.1111/1745-9125.12067
- MacCann, C., & Roberts, R. D. (2013). Just as smart but not as successful: Obese students obtain lower school grades but equivalent test scores to nonobese students. *International Journal of Obesity*, 37, 40–46. doi: 10.1038/ijo.2012.47
- McLaughlin, J. E. (2002). Reducing diagnostic bias. *Journal of Mental Health Counseling*, 24, 256-269. doi: 10.1016/j.brat.2004.09.004.
- McLean, S. A. (2013). Body dissatisfaction and obesity: Consequences and implications for intervention. *Obesity Research and Clinical Practice*, 7, e10-e10. doi: <http://dx.doi.org/10.1016/j.orcp.2013.12.518>
- Micali, N., Martini, M.G., Thomas, J.J., Eddy, K.T., Kothari, R., Russell, E., Bulik, C.M., & Treasure, J. (2017). Lifetime and 12-month prevalence of eating disorders amongst women in mid-life: a population-based study of diagnoses and

- risk factors. *BMC Medicine*, 15(12), 1-10. doi: 10.1186/s12916-016-0766-4.
- Mitchison, D., Basten, C., Griffiths, S., & Murray, S. B. (2017). Beneath the tip of the iceberg: Why so many people with eating disorders are not referred for treatment. *Australian Family Physician*, 46 (7), 539-540. Retrieved from:
<https://www.racgp.org.au/afp/2017/july/beneath-the-tip-of-the-iceberg-why-so-many-people-with-eating-disorders-are-not-referred-for-treatment/>
- Molloy, B. L., & Herzberger, S. D. (1998). Body images and self- esteem: A comparison of African–American and White women. *Sex Roles*, 38, 631–643. doi: 10.1177/0021934708320012
- Mond, J. M., Robertson-Smith, G., & Vetere, A. (2006). Stigma and eating disorders: Is there evidence of negative attitudes towards anorexia nervosa among women in the community? *Journal of Mental Health*, 15(5), 519-532. doi: 10.1080/09638230600902559
- Moradi, B., & Huang, Y. (2008). Objectification theory and psychology of women: A decade of advances and future directions. *Psychology of Women Quarterly*, 32, 377–398. doi: 10.1111/j.1471-6402.2008.00452.x
- Morland, K., Wing, S., & Diez Roux, A. (2002). The contextual effect of the local food environment on residents' diets: The atherosclerosis risk in communities study. *American Journal of Public Health* 22, 761–1767. doi: 10.2105/AJPH.92.11.1761.

- Moskowitz, L., & Weiselberg, E. (2017). Anorexia nervosa/atypical anorexia nervosa. *Current Problems in Pediatric and Adolescent Health Care*, 47(4), 70-84. doi: 10.1016/j.cppeds.2017.02.003.
- Mulholland, A. M., & Minz, L. B. (2001). Prevalence of eating disorders among African American women. *Journal of Counseling Psychology*, 48(1), 111-116. doi: 10.1037/0022-0167.48.1.111
- Myers, A., & Rosen, J. (1999). Obesity stigmatization and coping: Relation to mental health symptoms, body image, and self-esteem. *International Journal of Obesity & Related Metabolic Disorders*, 23, 221-230. doi: 10.1038/sj.ijo.0800765
- National Institute of Health (2000, October). *The practical guide: Identification, evaluations, and treatment of overweight and obesity in adults*. (NIH 00-408). Retrieved from: http://www.nhlbi.nih.gov/files/docs/guidelines/prctgd_c.pdf
- Nichter, M. (2000). *Fat talk: What girls and their parents say about dieting*. Cambridge: Harvard University Press.
- O'Brien, K.S., Latner, J.D., Ebner, D., & Hunter, J.A. (2013). Obesity discrimination: The role of physical appearance, personal ideology, and anti-fat prejudice. *International Journal of Obesity*, 37, 455-460. doi:10.1038/ijo.2012.52
- Ogden, C. L., Carroll, M., Kit, B., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *Journal of the American Medical Association*, 311, 8, 806-814.
- Ogden, C. L., Carroll, M. D., Curtin, L.R., McDowell, M. A., Tabak, C. J. & Flegal, K.

- M (2006). Prevalence of overweight and obesity in the United States, 1999-2004. *Journal of the American Medical Association*, 5(13), 1549-55.
doi:10.1001/jama.295.13.1549
- Olivardia, R., Pope, H.G., Borowiecki, J.J., & Cohane, G.H. (2004). Biceps and body image: The relationship between muscularity and self-esteem, depression, and eating disorder symptoms. *Psychology of Men & Masculinity*, 5(2), 112-120. doi: 0.1037/1524-9220.5.2.112
- Overstreet, N. M., Quinn, D. M., Bede Agocha, V. (2010). Beyond thinness: The influence of the curvaceous body ideal on body dissatisfaction in Black and White women. *Sex Roles*, 63, 91-103. doi: 10.1007/s11199-010-9792-4
- Pagan, J.A., & Davila, A. (1997). Obesity, occupational attainment and earnings. *Social Science Quarterly*, 78, 756-70. doi: 10.3368/jhr.50.3.759
- Pascal, B., & Kurpius, S. E. (2012). Perceptions of clients: Influences of client weight and job status, *Professional Psychology: Research and Practice*, 43(4), 349-355. doi: <http://dx.doi.org/10.1037/a0028525>
- Paul, R. J., & Townsend, J. B. (1995). Shape up or ship out? Employment discrimination against the overweight. *Employee Responsibilities and Rights Journal*, 8, 133–145. doi: 10.1007/BF02621279
- Paulsen, B. K. (1990). Position of the American Dietetic Association: Very-low-calorie weight loss diets. *Journal of the American Dietetic Association*, 90, 722-725. doi: 10.1016/j.jada.2008.11.041. 330

- Potamianos, G., Winter, D., Duffy, S.W., Gorman, D.M. and Peters, T.J. (1985). The perception of problem drinkers by general hospital staff, general practitioners and alcohol patients. *Alcohol*, 2, 563-566. doi:10.1016/0741-8329(85)90081-3
- Presnell K., Bearman, S. K., & Stice E. (2004) Risk factors for body dissatisfaction in adolescent boys and girls: A prospective study. *International Journal of Eating Disorders*, 36(4), 389-401. doi: 10.1177/0743558415594424
- Preti, A., Rocchi, M. B., Sisti, D., Camboni, M. V., & Miotto, P. (2011). A comprehensive meta-analysis of the risk of suicide in eating disorders. *Acta Psychiatrica Scandinavica*, 124(1), 6-17. doi: 10.1111/j.1600-0447.2010.01641
- Puhl, R.M. & Brownell, K.D. (2001). Bias, discrimination, and obesity. *Obesity Research*, 9, 788-805. doi: 10.1038/oby.2001.108. 2001
- Puhl, R. M., & Brownell, K. D. (2006). Confronting and coping with weight stigma: An investigation of overweight and obese adults. *Obesity* 14, 1802-1815. doi: 10.1038/oby.2006.208
- Puhl, R. M., & Heuer, C. A. (2009). The stigma of obesity: A review and update. *Obesity*, 17(5), 941-964. doi: 10.1038/oby.2008.636.
- Puhl, R. M., Moss-Racusin, C., & Schwartz, M. B. (2007). Internalization of weight stigma: Implications for binge-eating and emotional well-being. *Obesity*, 15, 19-23. doi: 0.1038/oby.2007.521
- Puhl, R. M., Latner, J. L., King, K., & Luedicke, J. (2013). Weight bias among professionals who treat eating disorders: Associations with attitudes about

- treatment and perceptions of patient outcomes. *International Journal of Eating Disorders*, 47, 65-75. doi: 10.1002/eat.22186
- Puhl, R. M., & King, K. (2013). Weight discrimination and bullying. *Best Practice and Research Clinical Endocrinology*, 27, 117-127. doi: 10.1016/j.beem.2012.12.002.
- Puhl, R. M., Luedicke, J., & Grilo, C. M. (2014). Obesity bias in training: attitudes, beliefs, and observations among advanced trainees in professional health disciplines. *Obesity*, 22(4), 1008-15. doi: 10.1002/oby.20637
- Puhl, R. M., & Suh, Y., (2015). Stigma and eating and weight disorders. *Current Psychiatry Reports*, 17(3), 552, doi: 10.1007/s11920-015-0552-6.
- Quinn, D.M., & Crocker, J. (1999). When ideology hurts: Effects of feeling fat and the Protestant ethic on the psychological well-being of women. *Journal of Personality and Social Psychology*, 77, 402-414. doi: 10.1037/0022-3514.77.2.402
- Ricca, V., Mannucci, E., Moretti, S., Di Bernardo, M., Zucchi, P. L., Cabras, & Rotella, C. M. (2000). Screening for binge eating disorder in obese outpatients. *Comprehensive Psychiatry*, 41(2), 111-115. doi:10.1016/S0010-440X(00)90143-3
- Robinson, S. (2006). Victimization of obese adolescents. *Journal of School Nursing*, 22, 201-206. doi: 10.1177/10598405050220040301
- Robinson, A. L., Boachie, A., & Lafrance, G. A. (2012). Assessment and treatment of pediatric eating disorders: A survey of physicians and psychologists. *Journal of*

- the Canadian Academy for Child and Adolescent Psychiatry*, 21,45–52. Retrieved from:https://www.researchgate.net/publication/221799973_Assessment_and_treatment_of_pediatric_eating_disorders_a_survey_of_physicians_and_psychologist
- Robinson, A., Boachie, A., & Lafrance, G. A. (2013). “I want help!”: Psychologists’ and physicians’ competence, barriers, and needs in the management of eating disorders in children and adolescents in Canada. *Psychologie Canadienne*, 54(3), 160-165. doi: 10.1037/a0032046
- Roehling, M. V. (1999). Weight-based discrimination in employment: psychological and legal aspects. *Personnel Psychology*, 52, 969–1017. doi: 10.1111/j.1744-6570.1999.tb00186.x
- Rohde, P., Stice, E., & Marti, C. N. (2015). Development and predictive effects of eating disorder risk factors during adolescence: Implications for prevention efforts. *International Journal of Eating Disorders*, 48(2), 187-198. doi: 10.1002/eat.22270
- Rome, E. S., & Ammerman, S. (2003). Medical complications of eating disorders: An update. *Journal of Adolescent Health*, 33(6), 418-426. doi: <http://dx.doi.org/10.1016/j.jadohealth.2003.07.002>
- Sabin J. A., Marini M., & Nosek B. A. (2012). Implicit and explicit anti-fat bias among a large sample of medical doctors by BMI, race/ethnicity and gender. *PLOS ONE*, 7, e48448 doi: 10.1371/journal.pone.0048448
- Saguy, A. C., & Gruys, K. (2010). Morality and health: News media constructions of

- overweight and eating disorders. *Social Problems*, 57 (2), 231-250. doi: 10.1525/sp.2010.57.2.231
- Sawyer, S. M., Whitelaw, M., Le Grange, D., Yeo, M., & Hughes, E. K. (2016). Physical and psychological morbidity in adolescents with atypical anorexia nervosa. *Pediatrics*, 137(4), 1-10. doi: 10.1542/peds.2015-4080
- St. James, H., Handelman, J.M., Taylor, S.F. (2011). Magical thinking and consumer coping. *Journal of Consumer Research*, 38(4), 632-649. doi: 10.1086/660163
- Schooler, D., Ward, L. M., Merriwether, A., & Caruthers, A. (2004). Who's that girl: Television's role in the body image development of young white and black women. *Psychology of Women Quarterly*, 28(1), 38-47. doi: 10.1111/j.1471-6402.2004.00121.x
- Scholtz, S., Hill, L.S., & Hubert, L. (2010). Eating disorders in older women: Does late onset anorexia nervosa exist? *International Journal of Eating Disorders*, 43(5), 393-397. doi: 10.1002/eat.20704
- Schvey, N. A., Puhl, R. M. Levandoski, K. A., & Brownell, K. D. (2013). The influence of a defendant's body weight on perceptions of guilt. *International Journal of Obesity*, 37, 8, 1275-1281
- Schwartz, M. B., Chambliss, H. O., Brownell, K. D., Blair, D. N., & Billington, C. (2003). Weight bias among health professionals specializing in obesity. *Obesity Research*, 11, 1033-1039. doi: 10.1038/oby.2003.142

- Schwartz, M. B., Vartanian, L. R., Nosek, B. A., & Brownell, K. D. (2006). The influence of one's own body weight on implicit and explicit fat bias. *Obesity, 14*(3), 440-447 , doi:10.1038/oby.2006.58
- Security Statement (n.d.). Retrieved October 6th, 2015 from:
<https://www.psychdata.com/content/security.asp>
- Servais, L. M., & Saunders, S. M. (2007). Clinical psychologists' perceptions of persons with mental illness. *Professional Psychology: Research and Practice, 38*(2), 214– 219. doi: 10.1037/0735-7028.38.2.214
- Smith, J. B., & Niemi, N. (2003). Body size and teacher bias: Exploring teacher ability perceptions of overweight girls at the start of school. *Journal of Educational Research, 21*(6), 23–32. doi:10.1080/09540250903464773
- Sorof, J. M., Lai, D., Turner, J., Poffenbarger, T., & Portman, R. J. (2004). Overweight, ethnicity, and the prevalence of hypertension in school-aged children. *Pediatrics, 113*, 475-82. doi: 0.1542/peds.2012-3523
- Spitzer, R. L., Devlin, M., Walsh, B., T., Hasin, D., Wing, R., Marcus, M., Stunkard, A., Wadden, T., Yanovski, S., Agras, S., Mitchel, J., & Nonas, C. (1992). Binge eating disorder: A multisite field trial of the diagnostic criteria. *International Journal of Eating Disorders. 11*(3), 191-203. doi: 10.1002/1098-108X(199204)11:3
- Stearns, P. N. 1997. *Fat History: Bodies and Beauty in the Modern West*. New York and London: New York University Press.

- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52, 613–629. doi:10.1037/0003-066X.52.6.613
- Stewart, M. C., Keel, P. K., & Schiavo, R. S. (2006). Stigmatization of anorexia nervosa. *International Journal of Eating Disorders*, 39(4), 320-325. doi: 10.1002/eat.20262
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychology Bulletin*, 128, 825-848. doi: 10.1007/s10484-015-9297-6
- 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, 445-57. doi: 10.1037/a0030679
- Stice E., & Whitenton K. (2002). Risk factors for body dissatisfaction in adolescent girls: A longitudinal investigation. *Developmental Psychology*. 38, 669–678. doi: 10.1002/eat.1103
- Stice E, Ng J, Shaw H. Risk factors and prodromal eating pathology. *Journal of Child Psychiatry*. 51(4):518–525. doi:10.1111/j.1469-7610.2010
- Striegel-Moore, R., & Bulik, C. (2007). Risk factors for eating disorders. *American Psychologist*, 62(3), 181-198. doi:10.1037/0003066X.62.3.181
- Strine, T.W. Mokdad, A. H., Dube, S. R., Balluz, L. S., Gonzalez, O., Berry, J. T., Manderscheid, R., & Kroenke, K. (2008). The association of depression and anxiety with obesity and unhealthy behaviors among community dwelling U.S.

- adults. *General Hospital Psychiatry*, 30, 127-37. doi:
10.1016/j.genhosppsych.2007.12.008.
- Strother, E., Lemberg, R., Stanford, S. C., Turberville, D. (2012). Eating disorders in men: underdiagnosed, undertreated, and misunderstood. *Eating Disorders*, 20(5), 346-355. doi: 10.1080/10640266.2012.715512
- Sutin, A. R. & Terracciano, A. (2013). Perceived weight discrimination and obesity. *PLoS ONE*, 8(7), 1-4. doi:
<http://dx.doi.org.ezp.twu.edu/10.1371/journal.pone.0070048>
- Stunkard, A. J., Faith, M. S., Allison, K. C. (2003). Depression and obesity. *Biological Psychiatry*, 54, 330-337.
- Sue, D. W., & Sue, D. (2008). *Counseling the culturally diverse: Theory and practice*. Hoboken, NJ: Wiley.
- Swanson, S. A., Scott, J.C., LeGrange, D., Swendson, J., & Merikangas, K. (2011). Prevalence and correlates of eating disorders in adolescents. *Archives of General Psychiatry*, 68 (7), 714-723. doi:10.1001/archgenpsychiatry.2011.22
- Swenne, I. (2016). Influence of premorbid BMI on clinical characteristics at presentation of adolescent girls with eating disorders. *BMC Psychiatry*, 16 (82), 1-7. doi:
10.1186/s12888-016-0788-7
- Swinbourne, J. Hunt, C., Abbott, M., Russell, J, St. Clare, T., Touyz, S. (2012). The comorbidity between eating disorders and anxiety disorders: Prevalence in an

- eating disorder sample and anxiety disorder sample. *Australian and New Zealand Journal of Psychiatry*, 46(2), 118-131. doi: 10.1177/0004867411432071
- Tasca, G. A., Demindenko, V. K., Bissada, H., Illing, V., Glick, M., Weekes, K., & Balfour, L. (2009). Personality dimensions among women with an eating disorder: Towards reconceptualizing DSM. *European Eating Disorders Review*, 17(4), 281-289. doi: 10.1002/erv.938
- Teachman, B. A., & Brownell, K. D. (2001). Implicit anti-fat bias among health professionals: Is anyone immune? *International Journal of Obesity*, 25, 1525-1531. doi:10.1038/sj.ijo.0801745
- Teachman, B.A., Gapinski, K.D., Brownell, K.D., Rowling, M., & Jeyaram, S. (2003). Demonstrations of implicit anti-fat bias: the impact of providing causal information and evoking empathy. *Health Psychology*, 11, 452-456. doi: 10.1037/0278-6133.22.1.68
- Thompson-Brenner, H., Satir, D. A., Franko, D. L., Herzog, D. B (2012). Clinician reactions to patients with eating disorders: A review of the literature. *Psychiatric Services*, 63(1), 73-8. doi: 10.1176/appi.ps.201100050
- Thornton, L. M., Mazzeo, S. E., & Bulik, C. E. (2011). The heritability of eating disorders: Methods and current findings. *Current Topics in Behavioral Neuroscience*, 6, 141-156. doi: 10.1007/7854_2010_91
- Tylka, T., & Subich, L. (2002). Exploring young women's perceptions of the effectiveness and safety of maladaptive weight control techniques. *Journal of Counseling and Development*, 80(101). doi: 10.1002/j.1556-6678.2002.tb00172.x

“The U.S. Weight Loss & Diet Control Market (14th ed.).” MarketData Enterprises, Inc.
May, 2017.

Villarejo, C., Fernandez-Aranda, F., Jimenez-Murcia, S., Peñas-Lledó, E., Granero, R.,
Penelo, E., Tinahones, F. J., Sancho, C., Vilarrasa, N., Montserrat-Gil de Bernabe,
M., Casanueva F. F., Fernández-Real, J. M., Frühbeck G., De la Torre, R.,
Treasure, J., and Botella C, Menchón, J. M. (2012). Lifetime obesity in patients
with eating disorders: increasing prevalence, clinical and personality correlates.
European Eating Disorder Review, 20(3), 250-254. doi: 10.1002/erv.2166

Vogel, D. L., Wade, N., & Hackler, S. (2007). Perceived public stigma and the
willingness to seek counseling: The mediating role of self-stigma and attitudes
toward counseling. *Journal of Counseling Psychology*, 54, 40-50. doi:
10.1037/0022-0167.54.1.40

Wadden, T. A. (1993). Treatment of obesity by moderate and severe caloric restriction.
Results of clinical research trials. *Annals of Internal Medicine*, 119(7), 688-693.
doi: 10.7326/0003-4819-119-7_Part_2-199310011-00012

Wadden, T.A., Foster, G. D., Sarwer, D. B., Anderson, D. A., Gladis, M., Anderson, R.
S., Letchak, R. V., Berkowitz, R., I., & Phelan, S. (2004). Dieting and the
development of eating disorders in obese women: results of a randomized
controlled trial. *American Journal of Clinical Nutrition*, 80, 560-568. doi:
10.1001/archinte.160.17.2581

- Walker, S., & Lloyd, C. (2011). Issues experienced by service users with an eating disorder: a qualitative investigation. *International Journal of Therapy & Rehabilitation, 18*, 542-549. doi: 10.12968/ijtr.2011.18.10.542
- Wang, S.S., Brownell, K.D., & Wadden, T.A. (2004). The influence of the stigma of obesity on overweight individuals. *International Journal of Obesity, 28*, 1333-1337. doi:10.1038/sj.ijo.0802730
- Wardle, J., Haase, A., & Steptoe, A. (2006). Body image and weight control in young adults: international comparisons in university students from 22 countries. *International Journal of Obesity, 30*, 644–651. doi: 10.1038/sj.ijo.0803050
- Warner, R. (1979). Racial and sexual bias in diagnosis: Psychiatrists and other mental health professionals compared by race, sex, and discipline. *Journal of Nervous & Mental Disease, 167*, 303-310. doi: 10.1097/00005053-197905000-00007
- Warner C. H., Warner C. M., Morganson J., Appenzeller G. N., Rachal J. & Grieger (2008) Military family physician attitudes toward treating obesity. *Military Medicine, 173*, 978–984. doi: 10.7205/MILMED.173.10.978.
- Watson, L., Robinson, D., Dispenza, F., & Nazari, N. (2012). African American women's sexual objectification experiences: A qualitative study. *Psychology of Women Quarterly, 36*, 458-475. doi: 10.1177/0361684312454724
- Wee, C. C., Davis, R. B., Chiodi, S., Huskey, K.W., & Hamel, M. B., (2015). Sex, race,

- and the adverse effects of social stigma vs. other quality of life factors among primary care patients with moderate to severe obesity. *Journal of General Internal Medicine*, 30 (2), 229-235. doi:10.1007/s11606-014-3041-4
- Whitelaw, M., Gilbertson, H., Lee, K. J., & Sawyer, S. M. (2014). Restrictive eating disorders among adolescent inpatients. *Pediatrics*, 134(3). 758-64. doi: 10.1542/peds.2014-0070.
- Wigton, R. S., & McGaghie, W. C. (2001). The effect of obesity on medical students' approach to patients with abdominal pain. *Journal of General Internal Medicine*, 16 (4), 262-265. doi: 10.1046/j.1525-1497.2001.016004262.x
- Williams, J. G., & Power, K. G. (1995) *The Stirling Eating Disorder Scales*. London: The Psychological Corporation.
- Williams, J. G., Power, K. G., Miller, H. R., Freeman, C. P., Yellowlees, A., Dowds, T., Walker, M., Parry-Jones, W. L. (1994). Development and validation of the Stirling Eating Disorder Scales. *International Journal of Eating Disorders*, 16(1), 35-43. doi: 10.1002/1098-108X(199407)16:1<35:AID-EAT2260160103>3.0.CO;2-4
- Wolf, N. (1991). *The beauty myth: How images of beauty are used against women*. New York: William Morrow.
- World Health Organization (2001). Human energy requirements. Retrieved from www.who.int/nutrition/publications/nutrientrequirements/9251052123
- World Health Organization (2015). Obesity and Overweight Fact Sheet.

Retrieved from: <http://www.who.int/mediacentre/factsheets/fs311/en/>

Young, L. M., & Powell, B. (1985). The effects of obesity on the clinical judgments of mental health professionals. *Journal of Health & Social Behavior*, 26, 233-246.
doi: 10.2307/2136755

APPENDIX A
VIGNETTE

Vignette

Please read the following passage, and then answer the questions according to the instructions.

L.N.

L.N. is an 18-year-old White woman. She is five feet, four inches tall and weighs 90 pounds. Six weeks ago she weighed 120 pounds. The following is a description of her typical daily activities.

Monday: She woke up and took a shower. L.N. tried on three different outfits before choosing what she was going to wear. She washed her hair twice before leaving to school. For breakfast, she had a banana. L.N. went to school. During lunch she ate three rice cakes and had apple juice. After school, L.N. had soccer practice for two hours and then went home. When she got home she took a shower. She next did her homework. For dinner L.N. ate salad and a baked potato. She watched TV for two hours and then went to bed.

Tuesday: She woke up and took a shower. L.N. tried on several different shirts before choosing which one she was going to wear. She spent half an hour curling her hair. She didn't have time for breakfast so drank some orange juice. L.N. went to school. During lunch she ate some pretzels, soda, and a pear. After school, L.N. had soccer practice for two hours, and a one-hour meeting for Key Club. When she got home, she drank some water and took a shower. She next did her homework. For dinner, L.N. ate a small bowl of vegetable soup with crackers, and drank a diet soda. She studied for a test for two hours, picked out her clothes for the next day for half an hour and then went to bed.

Wednesday: She woke up and took a shower and got dressed. Did her hair for twenty minutes. She had a piece of toast and some apple juice for breakfast. L.N. had a test in The morning for which she felt she did poorly on and was upset. Instead of eating lunch, she did her homework. After school, L.N. had soccer practice for two hours and then went home. When she got home she drank some diet soda. She then took a shower and watched TV. For dinner, L.N. ate some crackers, a salad, and drank some water. L.N. watched TV for two hours talked on the phone for an hour and half and then went to bed.

Thursday: She woke up and took a shower. She took an hour to get dressed and did her hair for twenty minutes. For breakfast, she ate an apple. She went to school. For lunch, she had a granola bar, an orange, and some skim milk. She gave a two-minute presentation in an afternoon class. After school she had soccer practice for two hours and then went home. When she got home she didn't eat anything and just took a shower. She talked on the phone for two hours and watched some TV. For dinner, L.N. drank some water and had a bag of chips. She then watched TV and had some raisins before going to bed.

Friday: She woke up and took a shower. She took half an hour to get dressed and just brushed her hair. For breakfast she had a grapefruit. She went to school and found out she did poorly on the test she took on Wednesday and was upset. During lunch she ate an egg salad and some grape juice. After school, L.N. had soccer practice for two hours and then went home. She went home and took a shower. She watched TV. For dinner she ate some black beans and rice with water. She then went to the movies with her friends.

APPENDIX B
CLINICAL IMPRESSIONS

Answer these questions to the best of your ability based on the information in the vignette.

Please rate the following on a scale from 1 to 5.

1=not at all

2=low

3=moderate

4=high

5=very high

1) What is the likelihood you would diagnose L.N. with anxiety?

1 2 3 4 5

2) What is the likelihood you would diagnose L.N. with depression?

1 2 3 4 5

3) What is the likelihood you would diagnose L.N. with an eating disorder?

1 2 3 4 5

4) What is the likelihood you would diagnose L.N. with psychosis?

1 2 3 4 5

5) How severe is L.N.'s presenting problem?

1 2 3 4 5

6) If you could pick only one of the following options as L.N.'s presenting problem, which would it be?

- A) Anxiety
- B) Depression
- C) Eating disorder
- D) Psychosis

7). Would you recommend that L.N. follow up with a medical doctor?

- A. Yes
- B. No

Please rate L.N. on each item on a scale of 0 to 3

0 = Never

1 = Sometimes

2 = *Often*

3 = *Very Often*

1) Unusually thin or underweight.

0 1 2 3

2) Refuses to eat enough food to keep a healthy body weight.

0 1 2 3

3) Has excessive worries about getting fat or becoming overweight.

0 1 2 3

4) Thinks she is fat or overweight but really isn't.

0 1 2 3

5) Has eating binges (eats an excessive amount of food in a short period of time).

0 1 2 3

6) Cannot stop eating or control how much she eats.

0 1 2 3

7) Uses very strict diets, vomiting, laxatives, or excessive exercise to control weight.

0 1 2 3

8) Seems over concerned about her weight or figure.

0 1 2 3

9) How often do these behaviors interfere with L.N.'s ability to do schoolwork or get along with others?

0 1 2 3

Please rate the severity of each of the following for L.N.:

0 = *Not at all*

1 = *Somewhat*

2 = *Quite a bit*

3 = *Extreme*

1) Binging behavior

0 1 2 3

2) Purging behavior

	0	1	2	3
3) Body dissatisfaction				
	0	1	2	3
4) Social difficulties				
	0	1	2	3
5) Academic work difficulties				
	0	1	2	3
6) Weight Loss				
	0	1	2	3
7) Excessive exercise				
	0	1	2	3

APPENDIX C
DEMOGRAPHICS

Please answer the questions in a way that applies best to you.

Directions: Circle the answer that best describes you.

1. Age: _____
2. Years of clinical experience: _____
3. Gender:
 - Female
 - Male
 - Transgender
4. Degree Type:
 - Masters in Counseling Psychology
 - Masters in Social Work
 - Masters in Counseling
 - Masters in Clinical Psychology
5. Ethnicity
 - Black
 - Asian
 - White
 - Hispanic
 - Pacific Islander
 - Two or more races
6. What is your height in inches? _____
7. What is your weight in pounds? _____

APPENDIX D
RECRUITMENT LETTER

Recruitment Letter

Subject: Research Study Volunteers Needed

My name is Molly McAshan, M.A., and I am a doctoral candidate at Texas Woman's University in Denton, TX. I am conducting an online study collecting data on clinical vignettes from Licensed Professional Counselors in the state of Texas. This study will be administered by Molly McAshan, M.A. under the supervision of Shannon Scott, Ph.D., and Sally D. Stabb, Ph.D., at Texas Woman's University.

Prior to beginning the online survey, you will be directed to a consent form. After reading and providing consent, you will begin the survey. This study will ask you to read a vignette and answer questions about it. Afterwards, you will be asked to complete a brief demographic information survey. Finally, you will receive debriefing information. The entire process will take approximately 20 minutes.

You must be 18 years of age or older to participate in this study. If you would like to participate in this study please click on the link below.

<Sign up form link goes here>

For more information or questions regarding these studies, please contact
Molly McAshan M.A.
Doctoral Student
Department of Psychology and Philosophy
469-XXX-XXXX
mmcashan@twu.edu

APPENDIX E
INFORMED CONSENT

TEXAS WOMAN'S UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Title: Individual differences in evaluation of a clinical vignette

Investigator: Molly McAshan, M.A.....email/phone #

Advisors: Shannon Scott, Ph.D.....email/phone #

Sally Stabb, Ph.D.....email/phone #

Explanation and Purpose of the Research

This study consists of reading a vignette and answering questionnaires. The purpose of the study is to examine how participants evaluate the vignette.

Description of Procedures

As a participant in this study you will be asked to spend approximately 20 minutes of your time. You will first be asked to read and agree to this consent form. After agreeing, you will be directed to the vignette. After reading, you will be asked a series of questions. Finally, you will be asked to provide basic demographic information.

Potential Risks

There is a possible risk involving loss of confidentiality. Confidentiality will be protected to the extent that is allowed by law. There is a potential risk of loss of confidentiality in all email, downloading and Internet transactions. The results of this study may be

presented in either conferences and/or scientific publications, without any of your identification information. There is also the possible risk of fatigue. You may take breaks as needed. Other possible risks include coercion and loss of time. Your participation is completely voluntary in this study, and you may stop at any time without consequences. The researchers will try to prevent any problem that could happen because of this research. Please feel free to contact the researchers if you have any difficulties. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

Questions Regarding the Study

If you have any questions about the research study you should ask the researchers. If you have any questions about your right as a participant you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940-898-3378 or via e-mail at IRB@twu.edu

- ☐ I agree to participate
- ☐ I do not agree to participate

APPENDIX F
DEBRIEFING FORM

Dear Participant:

During this study, you were asked to read a vignette and answer questions about it. The actual purpose of the study was to examine the potential impact of the vignette subject's weight and ethnicity on participants' evaluations of her symptoms. The rationale for this study was to identify whether or not weight and ethnicity may influence counselors who encounter clients with eating pathology.

If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study.

If you have questions about your participation in the study, please contact me at mmcashan@twu.edu, or either of my faculty advisors, Shannon Scott, Ph.D. (SScott@mail.twu.edu) or Sally D. Stabb, Ph.D. (SStabb@mail.twu.edu).

If you have questions about your rights as a research participant, you may contact the Texas Woman's University's Institutional Review Board at (940) 898-3378 or e-mail irb@twu.edu

We do ask that you not share information about the study with your peers as it may alter the way they respond.

Please again accept our appreciation for your participation in this study

APPENDIX G
REFERRAL

Referrals

If participation in this study has caused distress, the following are referrals for individual emotional support:

Texas Department of State Health Services comprehensive list of statewide crisis hotlines: <https://www.dshs.state.tx.us/mhsa-crisishotline/>

National Hope Line: 1-800-442-4673

You can find individual support in your area by using APA's [Psychologist Locator](http://locator.apa.org/) Service: <http://locator.apa.org/>

APPENDIX H
IRB APPROVAL LETTER



Institutional Review Board
Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378
email: IRB@twu.edu
<http://www.twu.edu/irb.html>

DATE: May 4, 2016

TO: Ms. Molly McAshan
Psychology & Philosophy

FROM: Institutional Review Board (IRB) - Denton

Re: Exemption for Individual Differences in Evaluation of a Clinical Vignette (Protocol #: 19022)

The above referenced study has been reviewed by the TWU IRB (operating under FWA00000178) and was determined to be exempt from further review.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. Because a signed consent form is not required for exempt studies, the filing of signatures of participants with the TWU IRB is not necessary.

Although your protocol has been exempted from further IRB review and your protocol file has been closed, any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any adverse events or unanticipated problems. All forms are located on the IRB website. If you have any questions, please contact the TWU IRB.

cc. Dr. Shannon Rich Scott, Psychology & Philosophy
Dr. Sally D. Stabb, Psychology & Philosophy
Graduate School
Shannon Scott