

**Client Perception of Therapist Body Size: Effect on Evaluations**

by

Ashley Nichole Malchow

A dissertation submitted to the Graduate Faculty of  
Auburn University  
in partial fulfillment of the  
requirements for the Degree of  
Doctor of Philosophy

Auburn, Alabama  
December 13, 2014

Keywords: body weight, therapist competency, counseling effectiveness, counselor characteristics, counselor evaluation, stereotypes

Copyright 2014 by Ashley Nichole Malchow

Approved by

Annette Kluck, Chair, Associate Professor of Counseling Psychology  
Randolph Pipes, Professor of Counseling Psychology  
Amanda Evans, Assistant Professor of Counselor Education

## Abstract

The present study sought to determine whether there are differences in the competency ratings assigned to counselors of varying body sizes and whether the relationship between these variables is moderated by the client's self-reported level of impulsivity and the counselor's gender. A total of 307 women were recruited from Amazon Mechanical Turk. Participants completed a demographic questionnaire and the Barratt Impulsiveness Scale-Brief. Additionally, they were presented with a computer generated image of a counselor, along with a brief description, and asked to rate the counselor's competency using the Counselor Rating Form-Short. Hierarchical regression analyses were employed to test the extent to which counselor body size related to assigned competency scores and the extent to which participant impulsivity and counselor gender moderated the relationship. Counselor body size predicted counselor competency scores such that smaller body size was associated with higher competency ratings. Study results did not support the hypothesis that participant impulsivity would interact with counselor body size to predict counselor competency ratings such that the significance of the relationship between perceived counselor body size and perceived competency was greater at higher levels of participant impulsivity. Instead, the negative relationship between counselor body size and counselor competency scores was found to be stronger for participants who reported low levels of impulsivity. The hypothesis that counselor gender would interact with counselor body size to predict counselor competency scores was not supported. Future research

needs to explore additional variables that may moderate or otherwise impact the relationship between counselor body size and counselor competency scores.

## Acknowledgments

I want to begin by saying how grateful I am for the support of my family. Mom, you have always been there to encourage me every step of the way. Thank you for helping me to keep going even when I wanted to give up! Dad, I am finally going to be a doctor! I do not think I will be able to buy you that new yacht quite yet though! Grandma, thank you so much for all the prayers! I could not have done this without them! Brenton and Kelly, I have so appreciated the support that you've given me throughout and I cannot wait until Kelly and I are both completely DONE with school!! To my amazing sisters, Staci, Martha, Alicia, and Courtney, I am so glad to have you in my life and greatly appreciate all of the support that you have given me. I cannot believe how much we have grown since undergrad and I love you all! Joe, I do not even know what to say. You have become such an amazing part of my life. Thank you so much for supporting me through this dissertation and my internship! I cannot wait to start the next phase of our life together. To the wonderful women who were part of my Dissertation Club, I cannot say thank you enough! Kori, Stephanie, and Elizabeth, I do not think that I could have made it through this without you girls. We are finally DONE and this process has brought us so close. I see many non-dissertation Skype sessions in our future. Finally, to my committee, Dr. Kluck, Dr. Evans, and Dr. Pipes, thank you so much for everything that you have done to make me the professional I am today. So many people have touched my life during my career at Auburn and it has been an amazing journey! I am grateful to everyone who has been a part of it and will hold you all in my heart! WAR EAGLE!

## Table of Contents

Abstract .....	ii
Acknowledgments.....	iv
List of Tables .....	viii
List of Figures .....	x
Chapter I. Introduction.....	1
Summary of Weight Bias in Counseling .....	7
Statement of the Problem and Research Hypotheses.....	8
Operational Definitions.....	9
Purpose.....	10
Summary .....	11
Chapter II. Literature Review .....	12
Stereotyping .....	12
Stereotypes in Counseling.....	19
Weight Stereotypes in Counseling.....	24
Weight Stigma Today .....	27
Impulsivity and Weight.....	30
Weight Stigma and Gender.....	31
Summary .....	32

Chapter III. Methods.....	34
Methodology.....	35
Participants.....	35
Measures .....	41
Demographic Questionnaire .....	41
Counselor Rating Form–Short (CRF–S).....	41
Barratt Impulsiveness Scale–Brief (BIS–Brief).....	43
Models.....	45
Design and Procedures.....	48
Data Analytic Strategy .....	50
Summary .....	51
Chapter IV. Results.....	53
Overview.....	53
Descriptive Statistics.....	53
Reliability Statistics .....	54
Simple Correlations between Variables.....	55
Model Size Predicting Counselor Competency Scores .....	60
Participant Impulsivity as a Moderator.....	62
Model Gender as a Moderator .....	65
Interaction between Model Gender, Model Size, and Participant Impulsivity.....	67
Preference for an Average Sized Counselor .....	71
Chapter V. Discussion .....	73
Meaning and Interpretation of Findings .....	73

Limitations .....	81
Sampling Bias .....	81
Methodological .....	81
Computer Generated Models .....	82
Relevance to Clinical Sample .....	83
Cross-Cultural Relevance .....	84
Measures .....	84
Implications.....	85
Future Directions .....	86
References.....	90
Appendices:	
Appendix A. Demographic Questionnaire.....	106
Appendix B. Counselor Models.....	108
Appendix C. Written Description to Accompany Models of Counselors .....	116
Appendix D. Sample Screen Shot of Ad with Model from Survey.....	117
Appendix E. Description of Task to be Posted on MTurk.com .....	118
Appendix F. Information Letter .....	119
Appendix G. Debriefing Letter .....	122

## List of Tables

Table 1	Demographic Characteristics of Participants.....	38
Table 2	Participants' BMI and History of Psychotherapy.....	40
Table 3	Demographic Options Selected to Generate Models.....	46
Table 4	Number of Participants Randomly Assigned to Each Model and Mean CRF-S Score of Model.....	51
Table 5	Descriptive Statistics and Chi Square Results, Demographic Differences Between Groups.....	54
Table 6	Reliability Coefficients for the CRF-S by Sample Group.....	55
Table 7	Comparison of Cronbach's Alpha.....	55
Table 8	Correlation Matrix for the Intercorrelations between Study Variables for all Participants.....	57
Table 9	Correlation Matrix for the Intercorrelations between Study Variables for Participants Who Saw the Largest Models.....	57
Table 10	Correlation Matrix for the Intercorrelations between Study Variables for Participants Who Saw the Second Largest Models.....	58
Table 11	Correlation Matrix for the Intercorrelations between Study Variables for Participants Who Saw the Second Smallest Models.....	58
Table 12	Correlation Matrix for the Intercorrelations between Study Variables for Participants Who Saw the Smallest Models.....	59
Table 13	Hierarchical Regression Analysis for Model Size and Participant Impulsivity (BIS-Brief) in Predicting Counselor Competency Scores.....	60
Table 14	Hierarchical Regression Analysis for Model Size and Participant Impulsivity (BIS-Brief) in Predicting Counselor Competency Scores Excluding Data from Participants with a Self-Reported History of Disordered Eating.....	61

Table 15	Hierarchical Regression Analysis for Model Size and Model Gender in Predicting Counselor Competency Scores for All Participants.....	66
Table 16	Hierarchical Regression Analysis for Model Size and Model Gender in Predicting Counselor Competency Scores for Participants without a History of Disordered Eating .....	66
Table 17	Hierarchical Regression Analysis for Interactions between Model Size, Model Gender, and Participant Impulsivity in Predicting Counselor Competency Scores for All Participants.....	68
Table 18	Hierarchical Regression Analysis for Interactions between Model Size, Model Gender, and Participant Impulsivity in Predicting Counselor Competency Scores for Participants without a History of Disordered Eating .....	69
Table 19	Bonferroni Results, CRF-S score differences Between Groups .....	72

## List of Figures

Figure 1	Graph showing the interaction between participant impulsivity (BIS–Brief scores) and model size in predicting counselor competency (CRF–S) scores .....	64
----------	---	----

## CHAPTER I. INTRODUCTION

On a typical day, the average person is bombarded with an extraordinary amount of sensory and cognitive input. Given the rapid influx of information that requires processing at nearly all times, human brains rely heavily on pre-existing beliefs, among other techniques (e.g., desensitization), to efficiently and effectively process the world and the people in it (Gilbert & Hixon, 1991; Macrae & Bodenhausen, 2000). In order to alleviate some of the cognitive load associated with consciously and individually evaluating every contact, new individuals (targets) may be categorized according to pre-existing beliefs or stereotypes (Gilbert & Hixon, 1991; Macrae & Bodenhausen, 2000). This process typically occurs rapidly at an implicit, not consciously examined, level (Greenwald & Banaji, 1995; Kahneman, 2003; Macrae & Bodenhausen, 2000; Stanovich & West, 2000). Such implicit categorizations typically rely upon readily available knowledge about the target, which is often drawn from physical characteristics and appearance (Dion, Berscheid, & Walster, 1972; Etcoff, Stock, Haley, Vickery, & House, 2011; Greenwald & Banaji, 1995; Naumann, Vazire, Rentfrow, & Gosling, 2009; Willis & Todorov, 2006), and tend to be stable over time. In fact, people have been shown to make reasonably precise and enduring evaluations of others with as little as 100 milliseconds worth of data (Etcoff et al., 2011; Greenwald & Banaji, 1995; Willis & Todorov, 2006).

When the brain is less busy, stereotype-inconsistent information is readily recognized and processed (Macrae & Bodenhausen, 2000; Snyder, Tanke, & Berscheid, 1977), but people more readily notice, remember, and bring to mind information that is consistent with stereotypes

during periods of cognitive busyness (Macrae & Bodenhausen, 2000; Snyder et al., 1977). Stereotypes can be valuable in alleviating cognitive load, but in order for the stereotype to be useful it must first be activated. Activation is dependent upon factors both internal and external to the individual. Internal factors include the individual's cognitive load, the individual's motivation to avoid the use of stereotypes, and the likelihood that the use of a stereotype will improve the individual's self-esteem (Gilbert & Hixon, 1991; Kahneman, 2003; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000). External factors that influence the activation of stereotypes include the salience of the stereotype to the situation and the type of judgment that is being made.

Even if the conditions are favorable, a stereotype may not always be activated. In most social interactions, each party has multiple noticeable traits (e.g., race, gender, etc.) that may be linked with a stereotype. In such cases, some stereotypes will be activated while others are inhibited, or not activated (Macrae & Bodenhausen, 2000; Sinclair & Kunda, 1999). Which stereotype is activated depends on the individual's background, the context of the situation, and the "prototypicality" of the target (Gilbert & Hixon, 1991; Kahneman, 2003; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000)

Once activation occurs, the stereotype may be applied, or used in developing judgments about the target (Gilbert & Hixon, 1991; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000). Application typically occurs at an implicit level and may influence the individual's behavior without their awareness (Greenwald & Banaji, 1995; Macrae & Bodenhausen, 2000). Like activation, application does not always occur and is dependent upon the following factors: the individual's cognitive load, the likelihood that the use of a stereotype will improve the individual's self-concept, and the individual's level of motivation to avoid

stereotype application (Gilbert & Hixon, 1991; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000).

Typically both activation and application of stereotypes, if they occur, arise rapidly upon the initiation of social interaction (Etcoff et al., 2011; Greenwald & Banaji, 1995; Willis & Todorov, 2006). Although both activation and application are implicit processes, an individual, if highly motivated, is able to thwart both process. In order to be successful, the individual must be aware of their biases (Macrae & Bodenhausen, 2000) and the availability of additional individuating information about the target is helpful (Krieglmeier & Sherman, 2012). Furthermore, efforts to prevent activation and application may, counterintuitively, increase accessibility of the stereotype and may result in increased stereotyping during periods of relaxed effort (Macrae & Bodenhausen, 2000).

A large percentage of mental health clients terminate treatment following the first counseling session, and most people who terminate treatment prematurely do so between sessions one and four (Brogan, Prochaska, & Prochaska, 1999; Garfield, 1994; Gearing, Townsend, Elkins, El-Bassel, & Osterberg, 2014). Therefore, judgments about treatment and determinations about continuation can likely be attributed to first impressions, which are often based on implicit stereotypes (Etcoff et al., 2011; Greenwald & Banaji, 1995; Willis & Todorov, 2006). In other words, we might be able to better understand treatment termination through examination of stereotype activation and application.

Counseling is a social interaction and the client's relationship with the counselor significantly impacts outcome (Norcross, 2011; Wampold, 2001). Therefore, stereotypes that include information about a counselor's social and interpersonal competence are likely to be relevant to the client's decision to terminate treatment (Ackerman & Hilsenroth, 2003; Chang &

Berk, 2009; Evans-Jones, Peters, & Barker, 2009; Fuertes & Brobst, 2002; Luborsky, Auerback, Chandler, Cohen, & Bachrach, 1971; Orlinsky, Grawe, & Parks, 1994). Importantly, some research has shown that the “what is beautiful is good” stereotype applies most prominently to social and interpersonal domains (Eagly, Ashmore, Makhijani, & Longo, 1991; Etcoff et al., 2011; Fuertes & Brobst, 2002; Snyder et al., 1977) and it is highly likely that physical attributes and beauty will be found to impact client’s judgments about their relationship with a counselor. In fact, research has identified significant relationships between counseling outcome and physical characteristics of both the client and the counselor (Barocas & Vance, 1974; Cabral & Smith, 2011; Cash & Kehr, 1978; Evans-Jones et al., 2009; Hassel, 2002; Pascal & Kurpius, 2012; Shapiro, Struening, Shapiro, & Barten, 1976; Tall & Ross, 1991; Thompson, Bazile, & Akbar, 2004).

The literature reveals that the counselor’s physical characteristics are correlated with the client’s judgments about the counselor and that the client’s weight is correlated with the counselor’s impressions about the client (Pascal & Kurpius, 2012). What is less clear, however, is the relationship between the counselor’s weight and the client’s impressions of the counselor. Two studies conducted in the 1980s (McKee & Smouse, 1983; Wiggins, 1980) examined that specific question. Wiggins (1980) reported a significant negative correlation between counselor body size and perceived counselor competency, but McKee and Smouse (1983) found no significant relationship between the two variables. No additional studies were found examining the effect of implicit bias related to perceived counselor weight on ratings of competency provided by clients. Extant literature in the fields of medicine and physical fitness reveal that non-obese physicians and physical fitness instructors are viewed more positively than obese physicians and physical fitness instructors (Bleich, Gudzone, Bennett, Jarlenski, & Cooper,

2013; Brudvig & Borna, 2012; Dean, Adams II, & Comeau, 2005; Evans, Cotter, & Roy, 2005; Harsha, Saywell, Thygerson, & Panozzo, 1996; Hash, Munna, Vogel, & Bason, 2003; Lubker, Watson II, Visek, & Geer, 2005; Melville & Maddalozzo, 1988), which suggests that similar results may be found in counseling and the evaluation of counselors by clients.

Since the 1980s, the prevalence of obesity in the United States has been steadily rising (Flegal, Carroll, Kuczmarski, & Johnson, 1998; Ogden, Carroll, Kit, & Flegal, 2012). Moreover, there has been increased national attention to obesity (Cohen, Perales, & Steadman, 2005), increasingly negative media portrayals of obesity (Sypeck, Gray, & Ahrens, 2004), and increased stigmatization of obesity (Andreyeva, Puhl, & Brownell, 2008) in the United States. Overweight and obese individuals report being stigmatized in nearly all settings (e.g., school, work, home, etc.) and implicit anti-fat biases have been found in individuals from all walks of life and of all weight statuses, including overweight individuals (Burmeister, Kiefner, Carels, & Musher-Eizenman, 2013; Cohen et al., 2005; Hassel, 2002; Kingkade, 2013; Pascal & Kurpius, 2012; Pingitore, Dugoni, Tindale, & Spring, 1994; Puhl & Brownell, 2001; Puhl & Heuer, 2009; Schwartz, Vartanian, Nosek, & Brownell, 2006). Although obesity may be considered unhealthy and has been shown to be correlated with increased likelihood for certain diseases and health problems (Centers for Disease Control and Prevention [CDC], 2012), the bias is likely to extend beyond a desire to promote health. A significant number of participants, both obese and non-obese, in one study were willing to make sacrifices up to and including the loss of one year of life and the loss of health to avoid being obese (Schwartz et al., 2006).

The focus on obesity tends to place the impetus upon on the individual to address the “problem” (Cohen et al., 2005), which increases the belief that obesity is somehow the individual’s fault. Stereotypes associated with obesity include laziness, lack of self-control, low

intelligence, and noncompliance with health recommendations (Cohen et al., 2005; Harris, Harris, & Bochner, 1982; Jackson, 1992; Miller & Lundgren, 2010; Puhl & Brownell, 2001; Puhl & Heuer, 2009; Saguy & Gruys, 2010). Impulsivity, or impairment of impulse control, is a complex concept popularly defined as, “A predisposition toward rapid, unplanned reactions to internal and external stimuli without regard to the negative consequences of these reactions to the impulsive individual or to others” (Stanford et al., 2009, p. 1784). The prominent social messages linking obesity and impulsivity (APA, 2013; Cohen et al., 2005; Klaczynski, Goold, & Mudry, 2004; Puhl & Brownell, 2001) increase the likelihood that the client’s preconceived notions about obese people will be activated if impulsivity is central to the client’s presenting concern (Kahneman, 2003; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000).

It is possible that individuals who perceive themselves as having any trait socially associated with obesity (Cohen et al., 2005; Harris et al., 1982; Jackson, 1992; Kahneman, 2003; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000; Miller & Lundgren, 2010; Puhl & Brownell, 2001; Puhl & Heuer, 2009; Saguy & Gruys, 2010), including high impulsivity, may be more susceptible to the activation of stereotypes related to obesity. If this is the case, prior research (e.g., Kahneman, 2003) on stereotype activation suggests those individuals would be more likely to negatively evaluate the counselor’s competency and ability to provide treatment than an individual who perceives themselves as having less of the trait (e.g., as being less impulsive). Therefore, when examining the relationship between the counselor’s body size and ratings of competency provided by clients, it is important to consider what impact the client’s level of impulsivity might have.

One additional factor which may increase the likelihood of stereotype activation is gender. Prior studies that have examined the relationship between a target’s perceived body size

and evaluations of the target by a rater have not found the gender of the target to be an important factor (Cash & Kehr, 1978; Harris et al., 1982; Paradise, Cohl, & Zweig, 1980; Wiggins, 1980). However, more recent studies suggest that women are held more stringently to physical appearance standards than are men (Burmeister et al., 2013; Carpenter, Hasin, Allison, & Faith, 2000; Eagly et al., 1991; Gortmarker, Must, Perrin, Sobal, & Dietz, 1993; Harris et al., 1982; Jackson, 1992; Miller & Lundgren, 2010; Pingitore et al., 1994; Schvey, Puhl, Levandoski, & Brownell, 2013; Stake & Lauer, 1987). Thus, interacting with a female counselor may increase the salience of the obesity stereotypes and thus increase the likelihood that the stereotype will be activated.

### **Summary of Weight Bias in Counseling**

Research has supported the importance of client and counselor physical appearance and attractiveness variables in the development of counseling relationships (Cabral & Smith, 2011; Carter, 1978; Cash, Begley, McCown, & Weise, 1975; Evans-Jones et al., 2009; Fuertes & Brobst, 2002; Harris & Busby, 1998; Hollander-Goldfein, Fosshage, & Bahr, 1989; Maramba & Nagayama Hall, 2002; Paradise et al., 1980; Shapiro et al., 1976; Tall & Ross, 1991). Despite evidence indicating that the client's weight is significantly related to the counselor's impressions about the client (Pascal & Kurpius, 2012) and that the weight status of physicians and fitness instructors is significantly related to how competent they are perceived to be (Bleich et al., 2013; Brudvig & Borna, 2012; Dean et al., 2005; Evans et al., 2005; Harsha et al., 1996; Hash et al., 2003; Lubker et al., 2005; Melville & Maddalozzo, 1988), extant literature does not adequately address the relationship between a counselor's body size and the client's impressions of the counselor. The two studies that were located in the literature were conducted in the 1980s and found contradictory results (McKee & Smouse, 1983; Wiggins, 1980). A more recent study

(Vocks, Legenbauer, & Peters, 2007) directly questioned participants about the importance of their counselor's body size and found a significant preference for average sized counselors. However, recent literature was not found to address the relationship between counselor body size and ratings of counselor competency and much remains unknown about how client's implicit weight biases may impact the counseling relationship.

### **Statement of the Problem and Research Hypotheses**

The literature remains unclear about the relationship between counselor body size and ratings of the counselor's competency. This correlation, along with potentially moderating factors, warrants further investigation. The present study sought to determine whether there are differences in the competency ratings counselors received across counselors of varying body sizes. This study attempted to determine the nature of the relationship (positive or negative correlation) and if the relationship is moderated by the client's self-reported level of impulsivity and the counselor's gender. Specifically, the current study addressed the following hypotheses:

- The counselor's body size is significantly and negatively correlated with participants' subjective ratings of the counselor's competency.
- The participant's level of impulsivity moderates the relationship such that the significance of the relationship between perceived counselor body size and perceived competency is greater at higher levels of participant impulsivity.
- The counselor's gender moderates the relationship such that the significance of the relationship between perceived counselor body size and perceived competency is greater for female counselors than for male counselors.

These hypotheses were intended to specifically address the impact of implicit weight bias on competency ratings provided for counselors and to collect more information about the possible mechanism of the relationship.

### **Operational Definitions**

Extant literature has examined this topic by categorizing pictured individuals into certain weight status groups (e.g., normal weight and overweight). However, these and other terms (e.g., underweight, obese, etc.) are medical terms identified with a specific Body Mass Index (BMI) or height-weight ratio. Given that valid BMI and height-weight ratio data is often unavailable for stock photographs and is unable to be determined for the computer-generated models used in this study, body size was used in the place of a specific weight category. Models were generated and, through comparison with each other, were classified as the smallest model, the second smallest model, the second largest model, and the largest model. Thus, the models were representatives of various points on the continuum of body size. While it is possible, and even likely, that participants perceived the models to belong to a specific weight category, no data was collected about which category the participants perceived the models to belong to. Given that the beauty ideal is based on perception rather than fact and that studies have shown the perceived weight of an individual to be more important than the actual weight (Eaton, Lowry, Brenew, Galuska, & Crosby, 2005), it is likely that participants' biases influenced their ratings whether the model belonged to a specific weight group or not.

Participants in this study were asked to rate the competency of one of eight pictured counselors. The range of opinions as to what constitutes competency makes the task of measuring a counselor's abilities difficult. Competency tends to be measured most effectively from within a specific theoretical framework (Sharpless & Barber, 2009; Thompson & Hill,

1993). For the purposes of this study, participants used the Counselor Rating Form-Short version (CRF-S), a cross-theoretical measure developed by Corrigan and Schmidt (1983), to evaluate the pictured counselor's competency. The measure specifically evaluates various characteristics situated on three dimensions of counselor behavior (expertness, attractiveness, and trustworthiness; Barak & LaCrosse, 1975) and overall competency was defined as the average total score on the CRF-S.

Finally, participants' self-reported impulsivity was evaluated as part of this study. Impulsivity is a complex concept popularly defined as a tendency to quickly respond to internal and external stimuli without planning or regard for outcome (Stanford et al., 2009). The Barratt Impulsiveness Scale-11 (BIS-11; Patton et al., 1995) is considered to be one of the most widely used measures of impulsivity in both research and clinical settings (Stanford et al., 2009) and a validated shorter version, the BIS-Brief, was used to measure impulsivity in this study. Specifically, the total BIS-Brief score was used to capture the overall impulsiveness of each participant (Steinberg et al., 2013).

### **Purpose**

The purpose of the current study was to examine, in today's cultural milieu, the relationship between a counselor's body size and first impressions of therapeutic skill by potential clients. The present study obtained information about the extent and nature of the relationship as well as information about the potentially moderating variables of client's impulse control and counselor's gender.

The results of the present study add to the existing body of knowledge regarding weight stigma in general and provide a fuller picture of variables which may influence the direction and/or strength of the effect of weight bias on evaluations of others. It was also designed to add

to psychologists' knowledge about their specific physical attributes (e.g., body size) which may influence the relationship development and outcome of counseling. Perhaps most importantly, specific identified factors that may increase or decrease the likelihood of a client's implicit weight bias affecting the counseling relationship or outcome may aid in psychologists' decision-making process about if, how, and when to address weight bias with their clients. For example, a counselor who identifies a client as being at-risk for discontinuing treatment due to weight stigma may find it beneficial in building rapport to discuss with the client what it is like to be working with a counselor of their body size. While not specifically addressing weight bias with the client, such a conversation may improve rapport, bring the client's biases into their awareness, and allow for in-session processing.

### **Summary**

Existing research has not adequately described the impact of weight bias on counseling relationships and outcome. This dissertation study provides valuable information to the field of psychology regarding weight stigma and its impact on the counseling relationship and outcome. Results have implications for the types and timing of interventions that may be used to address biases and their impact on counseling. The following sections further elaborate on the existing cognitive theory of stereotyping as well as what is currently known about obesity and weight stigma and its impact in counseling. The study methodology and procedures are also delineated.

## CHAPTER II. LITERATURE REVIEW

### **Stereotyping**

When an individual (the rater) comes into contact with another person (the target), he or she forms immediate impressions of the target that influence later interactions with that target (Krieglmeyer & Sherman, 2012). These impressions are often formed quickly, based on data collected in as little as 100 milliseconds (Etcoff et al., 2011; Greenwald & Banaji, 1995; Willis & Todorov, 2006), and typically develop into conscious judgments about multiple aspects of the target's identity (e.g., professionalism, competence, safety, trust, etc.). Once made, the initial judgments have been shown to be stable over time (Jackson, 1992; Miller & Turnbull, 1986; Naumann et al., 2009; Wiggins, 1980; Willis & Todorov, 2006). The stability of judgments based on such little data is hypothesized to occur for two reasons. Initial observations are highly salient and more easily recalled (primacy effect) and all incoming information following the first encounter is processed in a manner consistent with the rater's expectations (confirmation bias; Bodenhausen & Wyer, 1985; Darley & Gross, 1983; Macrae & Bodenhausen, 2000; Snyder et al., 1977; Wiggins, 1980). In other words, when interacting with a target, raters are exposed to a large number of observations. Some of the observations most easily recalled are the first observations that the rater made (primacy effect). These observations lead to the generation of expectations about the target and, from that point forward in the interaction, all incoming information is processed in a manner consistent with those expectations (confirmation bias).

Stereotypes and pre-existing expectations strongly influence the nature of the rater's memories of the target (Macrae & Bodenhausen, 2000) and thus set the framework for all future encounters. During periods of high cognitive load, stereotype-consistent information is more easily remembered, noticed, and brought to mind than stereotype-inconsistent information whereas, during periods of low cognitive load, stereotype-inconsistent information dominates a rater's memory of a target (Macrae & Bodenhausen, 2000; Snyder et al., 1977). However, even in situations when stereotype inconsistencies are prominent, it is possible that the information will be reinterpreted in a stereotype-consistent manner (Brown, 2011; Snyder et al., 1977). For example, an individual who tends to conserve money may be interpreted as "thrifty," which has a somewhat positive connotation, or as "cheap," which has a more negative connotation (Snyder et al., 1977), depending on the associated stereotype. Furthermore, any gaps in available knowledge are filled with stereotype-consistent information (Brown, 2011; Snyder et al., 1977) and preexisting expectations about a target may act as self-fulfilling prophecies (Hebl & Dovidio, 2005; Jussim, 1986). Throughout social interactions, the rater's actions are guided by their expectations about the target (Macrae & Bodenhausen, 2000) and the rater's actions, in turn, prompt the target to behave in such a way as to fulfill pre-existing expectations (Hebl & Dovidio, 2005; Snyder, 1992; Snyder et al., 1977). Each of these processes serves to influence behavior, memories, and the continuation of stereotypes.

In order for stereotypes to be influential in social interactions, they must first be activated. Cognitive processing is done through two different systems, system one and system two. Whereas system two is more analytical, system one is "characterized as automatic, largely unconscious, and relatively undemanding of computational capacity" (Stanovich & West, 2000, p. 658). This type of processing is often labeled implicit and the goal of this system is to

interpret and predict interaction processes so as to make rapid decisions about the next step in the interaction. This process involves the activation of previously obtained knowledge that is not consciously remembered (Greenwald & Banaji, 1995; Kahneman, 2003; Macrae & Bodenhausen, 2000; Stanovich & West, 2000). When a rater interacts with a target, the stereotype associated with the target's trait is activated at a system one level (Gilbert & Hixon, 1991; Macrae & Bodenhausen, 2000). The term 'stereotype activation' refers to the increased accessibility of knowledge that is part of a stereotype (e.g., information about how members of that social group typically behave; Krieglmeyer & Sherman, 2012). Such an activation may influence the rater's explicit behaviors without their conscious awareness (Macrae & Bodenhausen, 2000). For example, studies have shown that when the African American stereotype is activated surreptitiously in a group of participants, hostile nonverbal behaviors are exhibited and when the elderly stereotype is activated surreptitiously, participants slow their walking pace significantly (Macrae & Bodenhausen, 2000).

Whether or not activation occurs depends on the salience of the target's noticeable trait to the situation, the rater's cognitive load, the type of judgment being made, the likelihood that the use of a stereotype will improve the rater's self-concept, and the rater's level of motivation to avoid stereotype activation (Gilbert & Hixon, 1991; Kahneman, 2003; Krieglmeyer & Sherman, 2012; Macrae & Bodenhausen, 2000). Of these conditions, it appears that the opportunity to improve one's self-concept through the use of stereotypes is the most important (Macrae & Bodenhausen, 2000). In other words, if using a stereotype in developing a judgment about a target has the potential to create a downward social comparison and/or improve the rater's self-concept, it is highly likely that the stereotype will be activated, no matter the other conditions (Macrae & Bodenhausen, 2000). If the opportunity for a downward social comparison is not

present, the salience of the target's noticeable trait to the situation is significantly positively correlated with the likelihood of activation and the cognitive load of the rater is significantly negatively correlated with the likelihood of activation (Gilbert & Hixon, 1991; Kahneman, 2003; Krieglmeyer & Sherman, 2012; Macrae & Bodenhausen, 2000). Furthermore, the type of judgment being made is important because subjective judgments are more likely to activate stereotypes than objective judgments due to the inherent process of comparing the target to a group in subjective decision-making (Macrae & Bodenhausen, 2000).

It is clear that conscious judgments can be influenced at an unconscious level by stereotypes and the literature reveals numerous noticeable traits of targets that elicit such stereotypes. Specifically, traits such as the target's handshake (Bernieri & Petty 2011), facial features (Naumann et al., 2009; Todorov, Mandisodza, Goren, & Hall, 2005; Willis & Todorov, 2006), clothing style (Lightstone, Francis, & Kocum, 2011; Naumann et al., 2009; Sebastian & Bristow, 2008), physical attractiveness (Byrne, London, & Reeves, 1968; Dion et al., 1972; Eagly et al., 1991; Jackson, 1992; Langlois et al., 2000; Naumann et al., 2009; Young, 1979), and amount of make-up (Etcoff et al., 2011). Physical appearance is one of the most obvious and accessible personal characteristics in social interactions (Dion et al., 1972; Naumann et al., 2009) and many first impressions are based on stereotypes related to readily apparent physical characteristics (Etcoff et al., 2011; Greenwald & Banaji, 1995; Willis & Todorov, 2006).

Each target that a rater comes into contact with has multiple noticeable traits and may fit into a number of different categories (e.g., race/ethnicity, gender, perceived body size, perceived social status, etc.). Which of the target's traits activate a stereotype depends on the rater's background (e.g., the rater's chronic prejudices and learning history), the context of the situation, and the "prototypicality" of the target (Gilbert & Hixon, 1991; Kahneman, 2003; Krieglmeyer &

Sherman, 2012; Macrae & Bodenhausen, 2000). A rater's chronic prejudices, stereotypes that are activated often, are more likely to be activated than stereotypes to which the rater is infrequently exposed, especially in situations where the activated stereotype contains information relevant to the interaction (e.g., level of competency) and the target exhibits highly stereotypic (prototypical) behaviors. In a situation where these circumstances (background, context, and prototypicality) do not designate the same stereotype for activation, it is unclear which takes precedence (Gilbert & Hixon, 1991; Kahneman, 2003; Krieglmeyer & Sherman, 2012; Macrae & Bodenhausen, 2000).

One theory posits that the stereotypes that are not activated are inhibited (Macrae & Bodenhausen, 2000). In other words, if a rater comes into contact with a multicategorical target (e.g., an obese, Hispanic, female), one dominant trait (e.g., obese) activates one stereotype and the other traits (e.g., Hispanic and female) are inhibited. For example, Sinclair and Kunda (1999) provided empirical evidence that information consistent with the doctor stereotype was more easily accessible than information consistent with the Black stereotype when participants were provided with positive compared to neutral feedback from a Black doctor and were thus motivated to view him as competent. The reverse was true when participants received negative feedback; information consistent with the Black stereotype was more easily accessible and information consistent with the doctor stereotype was inhibited (Sinclair & Kunda, 1999).

When a stereotype has been activated and stereotype-inconsistent information is present, it is quickly recognized and activates system two for analysis of the differences. However, dissonant information must be encountered and processed repeatedly in order to have a lasting impact on system one knowledge and stereotypes (Kahneman, 2003; Macrae & Bodenhausen, 2000; Stanovich & West, 2000). Thus, the target is in the position of having to prove themselves

by repeatedly demonstrating stereotype-inconsistent traits in a manner that successfully combats the effect of the bias. Furthermore, frequent inhibition of stereotypes that are inconsistent with the presentation of the target may prevent exposure to and processing of stereotype-inconsistent information that may have eventually had a long-term effect on the schema for that stereotype.

Despite the apparent implicit nature of the cognitive processes underlying stereotyping, it is possible for the rater to make a continual concerted effort to thwart the activation of stereotypes if they are highly motivated to do so (Macrae & Bodenhausen, 2000). In order to successfully thwart stereotype activation, the individual must be aware of their biases and be motivated to make an effort to thwart said biases (Macrae & Bodenhausen, 2000). Such an effort is demanding and requires near continuous cognitive monitoring for the presence of the activated stereotype, which, counterproductively, leads to increased accessibility of the stereotype and associated information (Macrae & Bodenhausen, 2000). Furthermore, such an effort may result in a rebound effect in that during periods of relaxed monitoring, increased stereotyping, increased discriminatory behavior, and greater recall for stereotype-consistent attributes of the target are more evident than if suppression was never attempted in the first place (Macrae & Bodenhausen, 2000).

If a rater is unsuccessful in their attempt or unmotivated to suppress stereotype activation, the activated stereotype may be applied when developing a judgment about the target person (Gilbert & Hixon, 1991; Krieglmeier & Sherman, 2012). Stereotype application is the use of the activated knowledge in perception and judgment (Krieglmeier & Sherman, 2012). Like stereotype activation, stereotype application typically occurs implicitly and may occur even when the trait that initially activated the stereotype is unrelated to the judgment being made (Greenwald & Banaji, 1995; Krieglmeier & Sherman, 2012). For example, a rater who is asked

to judge a target's competency will rely upon any information available to them (e.g., information from a stereotype activated by the target's level of physical attractiveness) to make a judgment even though the two characteristics are completely unrelated (Greenwald & Banaji, 1995).

Stereotype application is dependent upon the rater's cognitive load, the likelihood that the use of a stereotype will improve the rater's self-concept, and the rater's level of motivation to avoid stereotype application (Gilbert & Hixon, 1991; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000). Similar to stereotype activation, stereotype application is highly likely to occur in situations where the use of stereotypes to make a decision will serve an ego-protective function (Macrae & Bodenhausen, 2000). However, whereas cognitive load decreases the likelihood of stereotype activation, stereotype application is significantly positively correlated with cognitive load (Gilbert & Hixon, 1991; Macrae & Bodenhausen, 2000). Thus, the busier a rater is, the less likely the stereotype is to be activated, but stereotypes that have previously been activated are significantly more likely to be applied during busier times (Gilbert & Hixon, 1991; Macrae & Bodenhausen, 2000). Despite these conditions, if a rater is highly motivated to avoid stereotypic processing, it is possible for the rater to thwart the application of stereotypes through a method known as controlled cognitive processing (Macrae & Bodenhausen, 2000). Controlled cognitive processing occurs when a rater is able to replace stereotypic thoughts with non-prejudiced beliefs. However, to be effective the individual first must be aware of the stereotype, and then should have knowledge about the magnitude and direction of the stereotype and must make a continual concerted effort to thwart it (Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000).

While hindering stereotype activation and application is a difficult process, it is made easier when additional individuating information is available about the target (Krieglmeyer & Sherman, 2012). In contrast, the research is not clear as to whether additional and/or deeper interactions between a target and a rater will decrease the likelihood of stereotype application. In fact, some studies suggest that stereotype application occurs and the resulting judgments persist despite available individuating information (Hosoda, Stone-Romero, & Coats, 2003; Jackson, 1992; Miller & Turnbull, 1986; Naumann et al., 2009; Wiggins, 1980; Willis & Todorov, 2006).

### **Stereotypes in Counseling**

When counseling first begins, the client makes a judgment about counseling and the counselor. We know that between 20 and 57% of outpatient mental health clients terminate after session one (Brogan et al., 1999; Gearing et al., 2014) and that most people who prematurely terminate mental health treatment do so between sessions one and four (Garfield, 1994; Gearing et al., 2014). These rates are consistent with the medical and physical fitness fields, in which noncompliance with appointments is a pervasive problem. No-show rates of at least 20% are typical for first-time appointments in ambulatory treatment settings (Turkcan et al., 2013) and range between 15 and 35% for follow-up appointments at primary care clinics (Salameh, Olsen, & Howard, 2012). Approximately 45% of beginners drop out of structured exercise programs within the first six months and psychological retention programs have been met with only modest success (Dishman & Buckworth, 1996; Ekkekakis, Parfitt, & Petruzzello, 2011). Therefore, judgments about treatment and determinations about continuation can likely be at least partially attributed to first impressions, which, as discussed above, are often based on implicit stereotypes (Etcoff et al., 2011; Greenwald & Banaji, 1995; Willis & Todorov, 2006). The situation may be such that a decision is made about termination before additional

individuating information is able to be collected, deeper connections are able to be made, or the provider has had an opportunity to prove that they do not fit the stereotype.

As mentioned previously, research has identified numerous physical characteristics that may activate stereotypes and influence general social interactions. While we do not know specifically what keeps individuals in counseling, we do know that the relationship is important (Norcross, 2011; Wampold, 2001) so it is likely that a client's initial impressions of their counselor, and the relationship being built with the counselor, influence their decision to terminate treatment prematurely. In fact, working alliance and counselor interpersonal skill have been shown to be the best predictors of treatment outcomes (DiClemente, Carroll, Connors, & Kadden, 1994; Horvath & Symonds, 1991; Meier & Davis, 2010; Najavits & Weiss, 1994; Orlinsky et al., 1994) and studies have shown that clients who reported more positive perceptions of their counselors stayed in treatment longer and evidenced better psychiatric functioning at follow-up than those who did not (Kasarabada, Hser, Boles, & Huang, 2002). Furthermore, participants who reported being satisfied with their treatment typically reported that they felt emotionally attached or connected to their counselor whereas participants who reported being unsatisfied with their treatment typically highlighted difficulties within the therapeutic relationship as detracting from treatment outcomes (Ackerman & Hilsenroth, 2003; Bell, Montoya, & Atkinson, 1997; Chang & Berk, 2009). While this might suggest that the negative effects of bias may be offset by a strong therapeutic alliance, the client may decide to terminate treatment before a strong alliance is developed. Thus, it is important to discuss what characteristics may be related to stereotypes about interpersonal competency and relationship development skills.

Specific counselor characteristics have been identified as being positively correlated with the therapeutic alliance. Counselor warmth, respectfulness, trustworthiness, genuineness, attentiveness, and empathy (as rated by the client) are often associated with therapeutic improvement (Ackerman & Hilsenroth, 2003; Chang & Berk, 2009; Evans-Jones et al., 2009; Fuertes & Brobst, 2002; Luborsky et al., 1971; Orlinsky et al., 1994). Additionally, client ratings of improvement were correlated most highly with ratings of counselors as “understanding and accepting” (Cooley & Lajoy, 1980; Hollander-Goldfein et al., 1989; Ribner & Knei-Paz, 2002), friendly (Ribner & Knei-Paz, 2002), and caring (Ribner & Knei-Paz, 2002; Thompson & Hill, 1993). Overall, individuals rate therapeutic relationships based on various measures of counselor social and interpersonal competence. As such, specific social and interpersonal characteristics can be assessed to determine the client’s overall rating of the counselor’s competence.

Importantly, some research has shown that the “what is beautiful is good” stereotype applies most prominently to areas of social and interpersonal competence such that attractive people are rated more positively in social and interpersonal domains than unattractive people (Eagly et al., 1991; Etcoff et al., 2011; Fuertes & Brobst, 2002; Snyder et al., 1977). Furthermore, there has been considerable agreement about what constitutes attractiveness across ethnicity, age, and socioeconomic status (Jackson, 1992; Langlois et al., 2000) indicating that the relationship between the target’s attractiveness and more positive interpersonal ratings is not dependent upon the ethnicity, age, or socioeconomic status of the rater. Therefore, it is highly likely that physical attributes and beauty could affect ratings of the social and interpersonal factors which influence diverse raters’ judgments of their relationship with others, including individuals in the role of counselor.

In fact, there is significant empirical data to suggest that physical characteristics are related to evaluations of the therapeutic relationship by both the counselor and the client. Examples of such attributes found to be related to counselor impressions of the client and the therapeutic relationship include, but are not limited to, racial/ethnic background of the client (Thompson et al., 2004), physical attractiveness of client (Barocas & Vance, 1974; Cash & Kehr, 1978; Shapiro et al., 1976; Sue & Sue, 2012), and the client's weight (Hassel, 2002; Pascal & Kurpius, 2012). Typically, clinicians have been shown to favor, and therefore have better treatment outcomes with, YAVIS (young, attractive, verbal, intelligent, and successful) clients as opposed to QUOID (quiet, ugly, old, indigent, and dissimilar culturally) clients (Sue & Sue, 2012). Examples of attributes which have been found to be related to client impressions of the counselor and the therapeutic relationship include, but are not limited to, racial/ethnic background of the counselor (Cabral & Smith, 2011; Maramba & Nagayama Hall, 2002), perceived age (Farney, Aday, & Breault, 2006; Hollander-Goldfein et al., 1989; Tall & Ross, 1991), and physical attractiveness of counselor (Carter, 1978; Cash et al., 1975; Evans-Jones et al., 2009; Fuertes & Brobst, 2002; Harris & Busby, 1998; Paradise et al., 1980; Shapiro et al., 1976).

Although specific physical attributes have been studied independently, some researchers have focused more on demographic similarities between the client and the counselor. The research is not clear, but the relationship between therapeutic alliance and demographic similarities may be dependent upon the specific factor that the client and counselor have in common (Cabral & Smith, 2011; Hollander-Goldfein et al., 1989; Luborsky et al., 1971). In a meta-analytic review to clarify the literature, Montoya and Horton (2012) noted that the impact of counselor-client similarity is dependent upon how much the counselor and client have in

common overall and how salient the commonality is to the client. It is likely that both individual characteristics and similarities between the counselor and the client may impact the therapeutic relationship, but additional factors may moderate the relationships.

Some researchers have hypothesized that attractive people actually exhibit more positive qualities (e.g., more extraversion, more traditional attitudes, higher self-confidence and self-esteem, better social skills, better mental health, slightly higher intelligence) than unattractive people (Langlois et al., 2000). This has also been shown in the obesity literature as well such that obese African American women tend to evidence higher anxiety levels than overweight and normal weight African American women (Davis, Rovi, & Johnson, 2005) and obesity in women has been associated with increased likelihood of depression, suicidal ideation, and suicide attempts (Carpenter et al., 2000). The directionality of the relationship, however, is not clear, but the tendency for overweight targets to exhibit more negative qualities than average weight targets may be context specific. Burmeister et al. (2013) suggest that individuals who are obese, and therefore part of a stigmatized group, might actually exhibit compromised performance in situations where their social identity is devalued (social identity threat) or where stereotypes are likely to be relevant (stereotype threat). As previously noted, obesity and attractiveness stereotypes may be especially relevant in social situations (Eagly et al., 1991; Etcoff et al., 2011; Fuertes & Brobst, 2002; Snyder et al., 1977). Therefore, target individuals may be more likely to exhibit compromised performance in the context of counseling, a social situation. Thus it may be possible that the overweight person is not being judged independently on their weight, but rather portrays some other quality (i.e., self-efficacy or self-esteem) nonverbally which influences ratings. On the contrary, some studies have used the same target individual in both the overweight and average weight conditions by altering the photograph to make the target

appear overweight using cosmetics, prostheses, or Photoshop (Dean et al., 2005; McKee & Smouse, 1983; Melville, & Maddalozzo, 1988; Pingitore et al., 1994). Given that the only difference between the targets in these studies is their apparent weight, it is highly likely that the factor influencing competency ratings provided by the rater's is the target's perceived weight.

### **Weight Stereotypes in Counseling**

Though the specifics of the relationship are not clear, it is apparent that the personhood and individual characteristics of the counselor are inextricably intertwined with the outcome of counseling (Norcross, 2011). The literature reveals that the counselor's physical characteristics are correlated with the client's judgments about the counselor and that the client's weight is correlated with the counselor's impressions about the client (Pascal & Kurpius, 2012). What is less clear, however, is the relationship between the counselor's weight and the client's impressions of the counselor. Wiggins (1980) examined this question through ratings on the Counselor Rating Form (CRF) provided by graduate counselors-in-training who presented as mock clients to eight different counselors who had been pre-selected and ranked according to their perceived weight (normal weight or overweight). Wiggins (1980) found a significant correlation between the counselor's weight and the ratings that they received on the CRF such that overweight counselors of both genders were rated as less competent in all areas than their normal weight counterparts. While these results are significant, it is important to note that the clients in the Wiggins (1980) study knew in advance that they would be rating the counselors and on what they would be rating them. Effects of implicit biases on ratings are reduced when individuals have been asked to focus on the task of judgment and the likelihood of inhibition of application of the stereotype is increased (Bohner & Dickel, 2011; Greenwald & Banaji, 1995). Thus, it is possible that the real-world effect of weight bias on counseling sessions may be larger

than the effect found in this study. Alternatively, the sample size ( $n = 8$ ) in this study was small and Wiggins (1980) did not control for other counselor attributes (e.g., attractiveness and style of clothing) which are known to be related to competency ratings. Furthermore, each client participated in one session with each counselor and interpersonal differences between the counselors cannot be ruled out as contributing to the effect (Wiggins, 1980).

McKee and Smouse (1983) also attempted to study the relationship between counselor weight and ratings of competency provided by clients, but recruited actual clients presenting to a university counseling center as participants. The clients met with an intake counselor, were presented with a picture of a second counselor (normal weight or overweight), listened to an audiotaped explanation of what to expect from counseling which they were told was recorded by the pictured counselor, and then asked to rate the pictured counselor using the CRF (McKee & Smouse, 1983). The results of the study were not consistent with those obtained by Wiggins (1980) and no significant relationship was found between counselor's weight and the ratings that the counselor received on the CRF (McKee & Smouse, 1983). The sample ( $n = 80$ ) in the McKee and Smouse (1983) study was larger than that in the Wiggins (1980) study and did not provide an opportunity for the client to interact with the counselor prior to providing ratings. Although the participants in the McKee and Smouse (1983) study did not have an opportunity to interact with the counselors, Langlois et al. (2000) and Jackson (1992) provided evidence that pictures are just as valid as personal interactions in these types of studies. However, the pictures of counselors that were used were altered such that the head of the normal weight counselor was photographically imposed onto an overweight body in order to control for attractiveness (McKee & Smouse, 1983). It is unclear if the photographed face was altered to ensure fit between the head and body and interpersonal factors during the intake session cannot be ruled out as having

affected the results (McKee & Smouse, 1983). Additionally, each photograph was accompanied by a written description of the counselor (McKee & Smouse, 1983) and the possibility that the stereotype associated with the counselor's weight was inhibited due the activation of a stereotype associated with the written description cannot be ruled out.

Of the extant literature, the study conducted by Wiggins (1980) is most consistent with recent works examining weight bias in the medical and physical fitness fields. While one study suggests that the body weight of physical fitness instructors is not significantly related to student attitudes toward the instructor (Dean et al., 2005), the same study suggests that the body weight of physical fitness instructors is significantly related to student performance on outcome measures (e.g., a class exam). Furthermore, other studies suggest that physical fitness is one of the most important determining factors in selecting a physical fitness instructor or performance enhancement consultant (Evans et al., 2005; Lubker et al., 2005) and body weight of the instructor or consultant is significantly and negatively related to ratings of the instructor's or consultant's knowledge, students' performance on a content examination, students' intent to exercise, and students' ratings of the teacher's likability, expertise, and appropriateness as a role model (Lubker et al., 2005; Melville & Maddalozzo, 1988). Similarly, research in the field of medicine has shown that, beginning in childhood, patients are more likely to rate obese physicians as more judgmental, less likeable, and less expert (Bleich et al., 2013; Brudvig & Borna, 2012). Furthermore, patients reported higher levels of confidence in counseling for treatment of illness and health advice from non-obese than from obese physicians and reported increased willingness to comply with the exercise recommendations made by physicians of a "normal" weight and physicians who were "good exercise role models" (Harsha et al., 1996; Hash et al., 2003). Importantly, most research in the field tends to find the strongest negative

relationship between weight and competency ratings when the target is categorized as obese, but the relationship, while it still exists, is often not significant when the target is classified as overweight (Bleich et al., 2013; Brudvig & Borna, 2012; Dean et al., 2005; Hash et al., 2003).

### **Weight Stigma Today**

No additional studies were found examining the effect of implicit bias related to perceived counselor body size on ratings of competency provided by clients. Furthermore, both studies described above were conducted in the 1980s. Since that time, the prevalence of obesity in the United States has been steadily rising. According to the National Health and Nutrition Examination Surveys, the percentage of US adults classified as obese rose from 15.1% between 1976 and 1980 to 22.9% between 1988 and 1994 (Flegal et al., 1998) to 35.7% in 2010 (Ogden et al., 2012). Moreover, there has been an increased national focus on obesity in the United States. Media coverage of obesity-related topics more than quadrupled between 1999 and 2005 (Cohen et al., 2005). The increased coverage of obesity-related issues is not always positive and, in fact, research has noted increased stigmatization of obesity. According to Andreyeva et al. (2008), experience of discrimination based on weight increased by 66% between 1995 and 2006. This is bolstered by evidence of an increasingly thin beauty ideal, the promotion of thinness as a measure of beauty, and media stigmatization of obesity as compared with the 1980s (Puhl & Heuer, 2009; Sypeck et al., 2004). In media, there has been a prominent movement toward the use of more full-body shots and smaller models dressed in more revealing clothing with no corresponding decrease in the age of the model (Sypeck et al., 2004). Models presented in media are intended to entice people to identify with them and purchase the product and are therefore considered representative of how people perceive beauty (Cohen et al., 2005; Sypeck et al., 2004). The beauty ideal is based on perception rather than fact (i.e., numerical weight of the

model) and, similarly, studies have shown that the perceived weight of an individual or the self may be more important psychologically than the actual weight (Eaton, Lowry, Brenew, Galuska, & Crosby, 2005).

Studies show that people perceived as obese, whether or not they are medically categorized as obese, are stigmatized and discriminated against at work, at school, and in healthcare settings (Pingitore et al., 1994; Puhl & Brownell, 2001; Puhl & Heuer, 2009). Parents have been shown to provide less college funding for their overweight children than for their average weight children (Pingitore et al., 1994; Puhl & Brownell, 2001; Puhl & Heuer, 2009) and obese individuals report that they feel “judged” when going into the doctor’s office and working out at the gym (Cohen et al., 2005). The effect is also found in educational settings where the number of post-interview offers of admission has been shown to be negatively correlated with the BMI of the applicant (Burmeister et al., 2013). A recent example of this surfaced when one university professor of psychology posted on a popular social media site, “Dear obese PhD applicants: if you didn’t have the willpower to stop eating carbs, you won’t have the willpower to do a dissertation #truth” (Kingkade, 2013).

Psychological organizations, such as the American Psychological Association, medical organizations, and mental health professionals are not immune to biases about obesity (Hassel, 2002; Pascal & Kurpius, 2012). For example, an article published in the Journal of the American Medical Association (JAMA; Gaziano, 2010) attributes obesity to “adverse lifestyle habits,” including inactivity, and increased medical spending has been attributed to increasing rates of obesity, poor diet, and inactivity (Finkelstein, Trogon, Cohen, & Dietz, 2009). The terminology used to discuss obesity in these publications holds inherently negative connotations. Furthermore, obesity was recently declared a disease by the American Medical Association

(AMA; Drummond, 2013). Although obesity may be considered unhealthy and has been shown to be correlated with increased likelihood for certain diseases and health problems (Centers for Disease Control and Prevention [CDC], 2012), the bias is likely to extend beyond a desire to promote health. A significant number of participants, both obese and non-obese, in one study were willing to make sacrifices up to and including the loss of one year of life and the loss of health to avoid being obese (Schwartz et al., 2006). Moreover, Kluck (2010) found that receiving messages from parents to control what they eat to manage weight was not significantly less damaging to daughters' body image than critical messages about weight. In her study, the relationship between parental messages to control what one eats to manage weight and increased body dissatisfaction were not a function of BMI.

The focus on obesity tends to place the impetus upon on the individual (Cohen et al., 2005), which increases the belief that obesity is somehow the individual's fault. Stereotypes associated with obesity include laziness, lack of self-control, low intelligence, and noncompliance with health recommendations (Cohen et al., 2005; Harris et al., 1982; Jackson, 1992; Miller & Lundgren, 2010; Puhl & Brownell, 2001; Puhl & Heuer, 2009; Saguy & Gruys, 2010). Even individuals who are themselves classified as obese, including obese mental health professionals, exhibit an implicit preference for thinner people and an implicit stereotype of fat people as lazy (Hassel, 2002; Puhl & Brownell, 2001; Schwartz et al., 2006). Categorization of obesity as the individual's fault is supported by doctors and the medical and insurance industries. In the DSM-5, obesity is listed under the heading Nonadherence to Medical Treatment (APA, 2013) and subconscious biases in the health community are well-documented (Cohen et al., 2005; Puhl & Heuer, 2009). One study even found that twenty-four percent of nurses reported being "repulsed" by obese patients (Puhl & Brownell, 2001). In contrast, media explanations of

anorexia and bulimia, disorders socially associated with thinness, have tended to focus on numerous factors outside of the individual's control (Saguy & Gruys, 2010). Obesity is often attributed to character deficits (Klaczynski, Goold, & Mudry, 2004; Miller & Lundgren, 2010) and has been increasingly associated with amoral behavior as evidenced by the emergence of the obesity-morality myth (Cohen et al., 2005; Saguy & Gruys, 2010). In a similar vein, Schvey et al. (2013) found that the perceived weight of a defendant in a trial may influence juror perceptions of guilt and potential for recidivism.

### **Impulsivity and Weight**

It is clear that U.S. society often places the impetus for being overweight and obese upon the individual and stereotypes such individuals as lazy, amoral, and lacking impulse control (APA, 2013; Cohen et al., 2005; Klaczynski et al., 2004; Puhl & Brownell, 2001). Impulsivity, or impairment of impulse control, is a complex concept popularly defined as, "A predisposition toward rapid, unplanned reactions to internal and external stimuli without regard to the negative consequences of these reactions to the impulsive individual or to others" (Stanford et al., 2009, p. 1784). The literature reveals that a stereotype is more likely to be activated if the target's noticeable trait is salient to the situation (Gilbert & Hixon, 1991; Kahneman, 2003; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000) and there is a prominent social link between obesity and impulsivity (APA, 2013; Cohen et al., 2005; Klaczynski et al., 2004; Puhl & Brownell, 2001). Therefore, it can be hypothesized that, if a client views themselves as highly impulsive, incoming information related to impulsivity will be more salient than non-related information and there is increased likelihood that the client's preconceived notions about obese people (who are often stereotyped as impulsive, e.g., Cohen et al., 2005) will be activated (Kahneman, 2003; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000).

Thus, it is possible that individuals who perceive themselves as having any trait socially associated with obesity (Cohen et al., 2005; Harris et al., 1982; Jackson, 1992; Kahneman, 2003; Krieglmeyer & Sherman, 2012; Macrae & Bodenhausen, 2000; Miller & Lundgren, 2010; Puhl & Brownell, 2001; Puhl & Heuer, 2009; Saguy & Gruys, 2010), including high impulsivity, may be more susceptible to implicit stereotype activation of that same stereotype (Kahneman, 2003) and therefore more likely to negatively evaluate the counselor's competency and ability to provide treatment than an individual who perceives themselves as having less of the trait (e.g., as being less impulsive). Therefore, when examining the relationship between the counselor's body size and ratings of competency provided by clients, it is important to consider what effect the client's level of impulsivity might have.

### **Weight Stigma and Gender**

One additional factor which may increase the likelihood of stereotype activation is gender. Prior studies that have examined the relationship between a target's perceived body weight and evaluations (e.g., competency) of the target by a rater have not found the gender of the target to be an important factor (Cash & Kehr, 1978; Harris et al., 1982; Paradise et al., 1980; Wiggins, 1980). However, more recent studies suggest that women are held more stringently to physical appearance standards than men (Burmeister et al., 2013; Carpenter et al., 2000; Eagly et al., 1991; Gortmarker et al., 1993; Harris et al., 1982; Jackson, 1992; Miller & Lundgren, 2010; Pingitore et al., 1994; Schvey et al., 2013; Stake & Lauer, 1987). Thus, interacting with a female counselor may increase the salience of size-related stereotypes and thus increase the likelihood that the stereotype will be activated. Gender match between the pictured counselor and the participant is unlikely to be important as demographic similarities between counselor and client have been shown to be of limited importance (Montoya & Horton, 2012) and men and women

have been found to be equally likely to endorse overall weight bias (Jackson, 1992; Langlois et al., 2000; Pingitore et al., 1994).

### **Summary**

In conclusion, interpersonal interactions are highly influenced by the activation and application of stereotypes, which aid in the development of first impressions that typically remain stable across time. The specific trait that activates a stereotype is one that is contextually salient. In the context of relationship development and judgments about competency, which typically occur early in psychotherapeutic relationships and are important for the continuation of treatment, attractiveness variables have been shown to be particularly relevant. Once confounding physical appearance and attractiveness variables (Cabral & Smith, 2011; Carter, 1978; Cash et al., 1975; Evans-Jones et al., 2009; Fuertes & Brobst, 2002; Harris & Busby, 1998; Hollander-Goldfein et al., 1989; Maramba & Nagayama Hall, 2002; Paradise et al., 1980; Shapiro et al., 1976; Tall & Ross, 1991) have been controlled for, body size is likely to be a significant variable in the activation of stereotypes in the context of relationship development and judgments about competency. Such a finding would be consistent with extant literature in the fields of medicine and physical fitness, which suggest that non-obese physicians and physical fitness instructors are viewed more positively than obese physicians and physical fitness instructors (Bleich et al., 2013; Brudvig & Borna, 2012; Dean et al., 2005; Evans et al., 2005; Harsha et al., 1996; Hash et al., 2003; Lubker et al., 2005; Melville & Maddalozzo, 1988). The relationship between counselor body weight and client perceptions of the counselor was examined in the 1980s, but the results of the two studies were contradictory (McKee & Smouse, 1983; Wiggins, 1980). Although there was some documentation of stigmatization of individuals perceived to be overweight and obese in 1980 (Harris et al., 1982), there is no clear evidence to

suggest that clients at that time evidenced significant bias against overweight and obese counselors. However, since 1980, there has been an increase in the reported amount of weight-based discrimination (Andreyeva et al., 2008), a larger portion of the population is now classified as obese (Ogden et al., 2012), significantly more attention has been paid to the “obesity epidemic” in the media (Cohen et al., 2005), and there has been an increasingly thin beauty ideal (Sypeck et al., 2004). Furthermore, Vocks et al. (2007) specifically asked participants diagnosed with an eating disorder or an anxiety disorder about the importance of the body size of their counselor and significant preferences for average sized counselors were recorded. Therefore, it is necessary to reexamine the relationship in today’s cultural milieu and, if an effect is found, to scrutinize other factors (e.g., impulsivity and gender) that may influence the relationship between obesity and ratings of competence.

### CHAPTER III. METHOD

This study was an experimental and descriptive study designed to elucidate the relationship between the identified central themes of weight bias, impulsivity, counselor competence, and counselor gender. Specifically, I examined if there was a significant negative relationship between how competent participants rated a pictured counselor to be and the perceived body size of the pictured counselor. Additionally, I evaluated the type of effect participants' self-reported level of impulsivity and the counselor's gender had on the relationship between perceived body size of the pictured counselor and competency. The population of interest, measures that were used, and study design and procedures are further discussed.

The present study aimed to address the following hypotheses: The perceived body size of the counselor is significantly and negatively correlated with participants' subjective ratings of the counselor's competency. The participant's level of impulsivity moderates the relationship such that the significance of the relationship between perceived counselor body size and perceived competency is greater at higher levels of participant impulsivity. The counselor's gender moderates the relationship such that the significance of the relationship between perceived body size of the counselor and perceived competency is greater for female counselors than for male counselors.

## **Methodology**

### **Participants**

Participants were solicited through online postings on Amazon Mechanical Turk (MTurk.com), an internet site that allows researchers to solicit people from a large pool of anonymous individuals to participate in research studies (e.g., surveys) for compensation. Inclusion criteria included age, gender identity, profession, and country of residence at the time of the survey. Individuals were required to be at least 19 years old to participate because 19 is the age of consent in some states. Additionally, although the literature suggests that men and women are equally likely to endorse overall weight bias (Jackson, 1992; Langlois et al., 2000; Pingitore et al., 1994), no recent studies were found to confirm this speculation. Therefore, only participants who identified as a woman were eligible to participate in order to avoid any potential effects of participant gender on the outcome. Thirdly, participants were required to reside in the United States at the time of survey completion because all information upon which the hypotheses were based (e.g., obesity rates, rates of weight discrimination, and beauty ideals) were obtained from studies conducted with participants in the United States. The Amazon Turk posting for this survey was accessible only to participants whose country of residence was identified as the United States in their Amazon Turk account profile. While cross-cultural comparisons would be informative and should be conducted in the future, it is likely that beauty ideals and size-based stereotypes may vary across cultures and that analysis is, therefore, beyond the scope of this study.

In addition, specific unique characteristics of participants were used to exclude individuals who might represent unique subpopulations within the overall population of adult women residing in the U.S. Specifically, participants were required to work, or be a

student/trainee, in a field other than counseling (e.g., job titles other than counselor, psychologist, social worker, or therapist) because participants who were counselors might rate the pictured counselors differently than participants who did not work as counselors (for example, they may recognize there is little information available to make an informed rating of competency). In addition, exclusion criteria also included any self-reported current or historical eating disorder and any self-identification inconsistent with the stated inclusion criteria. Given that individuals with eating disorder diagnoses have been shown in the literature to exhibit significant implicit and explicit weight bias (Vocks et al., 2007), participants were asked to provide information about their ongoing or historical struggles with disordered eating and data analyses were conducted both with and without data from participants who endorsed a history of a diagnosed eating disorder in order to determine if an effect existed.

An a priori power analysis revealed that a sample size of 130 was needed to achieve 80% power for finding a medium effect size when using an alpha level of .05 (Cohen, 1988). Four hundred and two participants responded to the advertisement to participate. Of the 402 people who attempted to take the survey, 3 exited the survey prior to providing consent to participate, 12 completed only one of the two required measures (BIS–Brief and CRF–S), 65 identified as male and were excluded from participating, and 15 were excluded from participating for identifying their profession as a counselor ( $n = 3$ ), psychologist ( $n = 3$ ), social worker ( $n = 4$ ), or trainee in the field of counseling, psychology, therapy or social work ( $n = 5$ ). A total of 307 participants responded to all measures and were included in the analysis.

All participants included in the analysis reported that they resided in the United States at the time of survey completion, identified as a woman, and were not working or training in the fields of counseling, psychology, therapy, or social work. Participants reported a mean age of

35.17 (i.e., ranging from 19 to 72;  $SD = 12.301$ ) and the majority (77.2%,  $n = 237$ ) of participants reported being between the ages of 19 and 45. Regarding racial and ethnic background, 237 (77.2%) participants identified as White or Caucasian, 38 (12.4%) as Black or African American, 20 (6.5%) as Asian, 12 (3.9%) as Hispanic or Latino, six (2.0%) as Biracial or Multiracial, two (0.7%) as Other, two (0.7%) as American Indian or Alaska Native, and one (0.3%) as Native Hawaiian and Other Pacific Islander. Of the two participants who identified their racial and ethnic background as Other, one participant described her background as “South American” and the other as “Moor.” Participants were encouraged to select all race and ethnicity labels that apply to them and eight participants selected more than one label. Thus, the totals do not equal the sample size ( $n = 307$ ). In the current study, the majority of participants identified as either single ( $n = 118$ ; 38.4%) or married ( $n = 105$ ; 34.2%) and reported having either completed some college courses ( $n = 89$ ; 29.0%) or received a degree from a four-year university ( $n = 93$ ; 30.3%). Demographic characteristics of the sample are further delineated in Table 1.

Table 1

*Demographic Characteristics of Participants*

Demographic Variable	<i>n</i>	%
<b>Marital Status</b>		
Single	118	38.4
Partnered/Long-term Relationship	48	15.6
Married	105	34.2
Separated	2	0.7
Divorced	26	8.5
Widowed	7	2.3
Other (i.e., remarried)	1	0.3
<b>Highest Level of Education Completed</b>		
Graduate degree	42	13.7
Some graduate school	19	6.2
Degree from a four-year university	93	30.3
Degree from a two-year college	29	9.4
Vocational School	11	3.6
Some College	89	29.0
High school diploma	19	6.2
General Education Diploma (GED)	4	1.3
Other (i.e., some high school)	1	0.3

Information about participants' psychotherapy history and BMI was also collected. The participants in this study self-reported their height (in inches) and weight (in pounds), which were then used to calculate their BMI. Height values for two participants (i.e., 164 inches and 163 inches) were determined to be outliers and were considered unlikely to be valid given that the values represented heights over 13 feet and resulted in BMI values under 5. Therefore, the data points were removed from the sample and replaced using the Series Mean method. Missing height data for one participant and missing weight data for two participants were also replaced using the Series Mean method. This resulted in a mean BMI of 27.36 (i.e., ranging from 16.64 to 72.18;  $SD = 8.55$ ), which is considered overweight. The largest percentage of the sample ( $n = 144$ ; 46.9%), however, reported a BMI in the normal range (i.e., a BMI ranging from 18.5 to 24.9) and the median BMI of the sample was 24.86, which is considered normal. This is not consistent with the statistics available about the US population, 68.5% of which is considered to be overweight or obese (Ogden, Carroll, Kit, & Flegal, 2012). Furthermore, it is important to note that although the BMI values reported above are consistent with specific body types (e.g., underweight, normal, overweight, and obese), BMI is based only on height and weight information and may not accurately represent body shape/size nor the health of the individual. For example, individuals with significant muscle mass would have higher BMIs than other individuals who have the same amount of body fat without significant muscle mass. The group with significant muscle mass may have a high BMI without being considered clinically obese. In regards to history of involvement with psychotherapy, the majority of the sample (67.4%) reported involvement in four or fewer session of psychotherapy or counseling in their lifetime with 48.2% ( $n = 148$ ) of the sample reporting that they had never engaged in psychotherapy or counseling. Although, the majority of the sample ( $n = 282$ ; 91.9%) reported that they were not

engaged in psychotherapy or counseling at the time of survey completion, the percentage of participants engaged in psychotherapy or counseling at the time of the survey (8.1%) was larger than expected. Specifically, only 3% of the U.S. population engage in therapy each year (Weissman et al., 2006). Additional information about participants' BMI and engagement with psychotherapy can be found in Table 2.

Table 2

*Participants' BMI and History of Psychotherapy*

Variable	<i>n</i>	%
<b>BMI Category<sup>a</sup></b>		
Underweight	15	4.9
Normal Weight	144	46.9
Overweight	68	22.1
Obese	80	26.1
<b>Number of prior psychotherapy or counseling sessions</b>		
0	148	48.2
1 – 4	59	19.2
5 – 10	27	8.8
More than 10	73	23.8
<b>Engaged in psychotherapy or counseling at time of survey</b>		
Yes	25	8.1
No	282	91.9

<sup>a</sup>BMI weight categories are defined by the Centers for Disease Control and Prevention (CDC)

As noted previously, information about the participants' struggles with disordered eating was also collected. Data was not available about disordered eating for one survey participant, but the majority of the sample ( $n = 289$ ; 94.1%) reported that they had never been diagnosed with an eating disorder. Of the 18 participants who reported that they had been diagnosed with an eating disorder, two reported having been diagnosed with three separate conditions (i.e., Anorexia Nervosa, Bulimia Nervosa, and Binge-Eating Disorder), one reported being diagnosed with both no eating disorder and with Bulimia Nervosa, one reported being diagnosed with both Binge-Eating Disorder and Bulimia Nervosa, two reported being diagnosed with Anorexia Nervosa, four reported being diagnosed with Bulimia Nervosa, four with Binge-Eating Disorder, and four with some other eating disorder. Of the four people who reported receiving some other eating disorder diagnosis, one described her diagnosis as "ED-NOS (restrictive)," another described her diagnosis as "obesity," another as "glutton," and one did not provide additional details about her diagnosis. Analyses run without participants who reported symptoms of disordered eating omitted responses from these 18 individuals.

## **Measures**

**Demographic questionnaire.** A 13 item demographic questionnaire was administered to all participants (see Appendix A). Both fill-in-the-blank and multiple-choice items were included to gather information such as age, gender, race and ethnicity, the highest level of education completed, mental health treatment history, and weight.

**Counselor rating form–Short (CRF–S).** The range of opinions as to what constitutes competency makes the task of measuring a counselor's abilities difficult and competency tends to be measured most effectively from within a specific theoretical framework (Sharpless & Barber, 2009; Thompson & Hill, 1993). The Counselor Rating Form–Short (CRF–S), developed

by Corrigan and Schmidt (1983), is one cross-theoretical measure that clients can use to evaluate a counselor's competency. The measure specifically evaluates various characteristics situated on three dimensions of counselor behavior (expertness, attractiveness, and trustworthiness), one of which is the interpersonal domain (Barak & LaCrosse, 1975). The CRF-S was administered to all participants and was used to assess participants' ratings of the pictured counselors' competency. The CRF-S is a shortened version of the Counselor Rating Form (CRF), which has been used in similar studies across the literature (Cash & Kehr, 1978; Evans-Jones et al., 2009; Fuertes & Brobst, 2002; McKee & Smouse, 1983). The CRF was developed by Barak and LaCrosse (1975) to investigate three proposed dimensions of counselor behavior: expertness, attractiveness, and trustworthiness. Scale authors identified 83 adjectives that, according to literature available at the time, described counselor behavior. The list was presented to a panel of expert judges who categorized each adjective into one of the three proposed dimensions of counselor behavior. Adjectives whose categorization yielded at least 75% inter-rater agreement were selected to be part of the instrument. An antonym was identified for each selected adjective and seven-point bipolar scales were created for each item pair. Examples of adjective pairs include: Expert/Inexpert, Informed/Ignorant, and Reliable/Unreliable. In total, the final scale contains 36 seven-point bipolar scales on which the participant is asked to rate a counselor.

The CRF-S was developed by Corrigan and Schmidt (1983) to address some potential limitations of the CRF, including the reading level, and to decrease the length of the measure while maintaining reliability of the subscales. The final version of the CRF-S contains four items on each of the three subscales resulting in a 12-item measure with an eighth grade reading comprehension level (Corrigan & Schmidt, 1983) and has been shown to be at least psychometrically comparable to the full CRF measure (Epperson & Pecnik, 1985). Corrigan and

Schmidt (1983) also noted a negative connotation associated with the antonyms identified for the CRF bipolar scales and opted instead to remove the antonyms and have participants rate only the extent to which a counselor demonstrates each positive characteristic, the 12 adjectives originally identified for use on the CRF, using seven-point Likert scales anchored by (1) not very and (7) very. The measure also includes the question, “How likely would you be to go to this counselor?” Participants respond to the question using the same seven-point Likert scale, but the response is not calculated into the total score of the instrument.

Both the CRF and CRF-S were originally designed to provide subscale scores for counselors on each of the three dimensions of behavior: expertness, trustworthiness, and attractiveness (Barak & LaCrosse, 1975; Corrigan & Schmidt, 1983). Although validation research has confirmed the existence of three distinct factors on both instruments, high interscale correlations have been consistently recorded, which suggests that the scale may be measuring one general factor and may be more reflective of the respondent’s general opinions about the counselor (Heppner et al., 2008; Wilson & Yager, 1990). Several studies have found good internal consistency ( $.89 < \alpha < .97$ ) and reliability constants and supported the use of the total CRF-S score as a global measure of counselor competence (e.g., Atkinson & Wampold, 1982; Constantine, 2007; Guinee & Tracey, 1997; Harari & Waehler, 1999; Kokotovic & Tracey, 1987; Tracey, Glidden, & Kokotovic, 1988). Thus, only total scores obtained on the CRF-S were used for the purposes of this study. Counselor’s total scores can range from 12 to 84, with lower scores representing less perceived competency.

**Barratt impulsiveness scale–Brief (BIS–Brief).** The BIS–Brief was administered to all participants and was used to assess participants’ self-reported impulsiveness. The BIS–Brief is a shortened version of the Barratt Impulsiveness Scale–11 (BIS-11). The original Barratt

Impulsiveness Scale (BIS) was developed in 1959 to assess the personality and behavioral construct of impulsiveness (Barratt, 1959). The BIS-11 marks the eleventh revision of the instrument (Patton et al., 1995), and is a 30-item self-report measure that is considered to be one of the most widely used measures of impulsivity in both research and clinical settings (Stanford et al., 2009). The BIS series has been designed specifically to avoid confounding symptoms of anxiety and impulsivity (Barratt, 1959). Furthermore, BIS-11 examines each of three proposed dimensions of impulsivity: motor impulsiveness, non-planning impulsiveness, and attentional impulsiveness (Patton et al., 1995). Despite the potential usefulness of the first- and second-order subscales for conceptualizing an individual's self-reported impulsiveness on each of the proposed dimensions of impulsivity, the majority of published studies that have used the BIS-11 examine only the overall impulsiveness of the respondent by calculating the total score of the measure (Stanford et al., 2009). Research has supported the total score of the BIS-11 to be an internally consistent measure of impulsivity (Patton et al., 1995) and published reliability coefficients (Cronbach's) for the BIS-11 total score range from 0.72 to 0.83 (Steinber, Sharp, Standford, & Tharp, 2013).

Steinberg et al. (2013) re-examined the factor structure of the BIS-11 and did not find support for the three-factor model. Furthermore, they concluded that many of the items on the BIS-11 were unrelated to the overarching factor of impulsivity. Thus, they developed and validated a shorter version of the BIS-11, the BIS-Brief, which included only items from the BIS-11 that were found to be most consistent with a unidimensional model of impulsivity (Steinberg et al., 2013). The final BIS-Brief measure includes eight items from the BIS-11 and has been shown to be at least psychometrically comparable to the full BIS-11 measure (Steinberg et al., 2013). Scores on the BIS-Brief also differentiate between groups and shows

similar patterns of correlations to what is observed with the BIS–11 (Steinberg et al., 2013). The items are scored on a 4-point scale (1 = rarely/never, 2 = occasionally, 3 = often, 4 = almost always/always) with items one, four, five, and six being reverse scored. Total scores can range from 8 to 32, with higher scores representing greater levels of impulsivity. However, there are no available empirically supported cutoffs to determine at what score respondent’s impulsivity level may be problematic or clinically significant.

## **Models**

Langlois et al. (2000) and Jackson (1992) provided evidence that pictures are just as valid as personal interactions for the purpose of research studies such as this one. Therefore, images of counselors (see Appendix B) in conjunction with written descriptions (see Appendix C) were used in this study in place of interpersonal interactions with the counselors. Two professionally and similarly dressed (Naumann et al., 2009; Sebastian & Bristow, 2008; Lightstone et al., 2011) models, one male and one female, were created using the *Model My Diet* software. The height values entered for both models was five feet eight inches and the four body weights entered into the software to generate models representing various body sizes were 119 pounds, 151 pounds, 183 pounds, and 215 pounds. The same weights were used for both the male and female models. The specific weight values were selected to maintain an equivalent increase in weight (i.e., 32 pounds) from one model to the next and to ensure that each BMI category, as defined by the CDC, was represented. Although the height and weight values were selected to match specific BMI categories (e.g., the height and weight values entered for the smallest models are equivalent to a BMI of 18.09, which is considered underweight according to the CDC), there is no research regarding the ability of the *Model My Diet* software to accurately depict BMI. All eight models used the same height. The figure of the model was altered using the software so that the same

model characteristics were used for each body size (the smallest, the second smallest, the second largest, and the largest). For all demographic options selected to create the models in the *Model My Diet* program refer to Table 3. All models were presented in black and white and the images were cropped such that nothing below the models knee was visible.

Table 3  
*Demographic Options Selected to Generate Models*

Demographic Feature	Female Model	Male Model
Height	5'8"	5'8"
Body Shape	Apple	Regular
Bust (female)/Belly (male)	Small-Medium	Round
Skin Tone	Lightest Available	Lightest Available
Age	More Mature	More Mature
Nose	Narrower	Narrower
Lips	Fuller	Fuller
Eye Shape	Round	Round
Hair Color	Blonde (Lightest Available)	Blonde (Lightest Available)
Hair Style	Stock option (shoulder length)	Short with side part
Background	Blank	Blank
Outfit	Formal	Pink Shirt

Computer generated models were used in place of pictures or videos of people to control for individual differences in physical appearance (e.g., attractiveness, hair style, clothing, skin color/tone, and age) that may occur across people. Although computer generated models reduced the possibility that the proportions of the counselor would be perceived to look unnatural

they may distort the picture in other ways. Use of other methods to change the body size of a pictured counselor while controlling for attractiveness (e.g., cosmetics, prostheses, or using Photoshop technology to impose the head of one person onto the body of another) was found to produce proportions that looked unnatural in prior research (Dean et al., 2005; McKee & Smouse, 1983; Melville, & Maddalozzo, 1988; Pingitore et al., 1994). The same written description (see Appendix C) accompanied each picture for all models, both male and female, and did not include any gender pronouns (see Appendix D). The narratives were created based on collaboration with three professionals in the field of mental health and were designed to provide minimal detail about the model. The narrative had a Flesch-Kincaid reading grade level of 11.1.

Cabral and Smith (2011) completed a meta-analysis of 53 studies and concluded that racial-match between client and counselor is not a significant determinate in counseling outcome. Therefore, racial differences between the pictured counselor and the participant were considered unlikely to be a significant confounding factor. However, no significant data was found regarding the difference in application of weight stereotypes across racial and ethnic groups and, to avoid the potential confound, all pictures presented were of the same race. The 2013 demographic profiles of the American Psychological Association and the American Counseling Association reveal that the majority of the members of both organizations are Caucasian (American Psychological Association Center for Workforce Studies, 2013; R. A. Sites, American Counseling Association Member Programs Coordinator, personal communication, March 4, 2014). Therefore, the pictured counselors used in this study were Caucasian individuals. In regards to age, studies have shown that age-matching between client and counselor does not appear to improve outcome and, in fact, most people report a preference

for middle-aged (i.e., approximately 35 to 45 years old) counselors (Farney et al., 2006; Tall & Ross, 1991). The models developed for use in this study were created to appear of approximately the same age and the “more mature” option was utilized when creating the models in the *Model My Diet* software.

## **Design and Procedures**

After gaining approval from the Auburn University Institutional Review Board, participants were recruited, as described earlier, through online postings (see Appendix E) on Amazon Mechanical Turk (MTurk.com), an internet site that allows researchers to solicit people from a large pool of anonymous individuals to participate in research studies (e.g., surveys) for compensation. The investigator created a posting on MTurk.com that offered participation in a research study examining how counselors are perceived in their advertisements for \$0.25 compensation. The survey remained available on MTurk.com for one month. Upon clicking the survey link, participants were redirected from MTurk.com to the Qualtrics survey where they learned basic information about the study, but did not learn that body size was a variable being examined because such information may have primed the participant to be vigilant of their biases (Bohner & Dickel, 2011; Greenwald & Banaji, 1995) and may have resulted in the data being less representative of real-life scenarios. The participant learned about potential risks, that participation was voluntary and that no negative consequences would be incurred if they declined to participate, and that no identifying information would be collected (see Appendix F for information letter). They were then be asked to provide online informed consent.

After providing consent, the participants answered a series of demographic questions which confirmed their eligibility to participate in the study. The participants were administered a set of online questionnaires that included the following instruments: the demographic

questionnaire developed for this study, the BIS–Brief, and the CRF–S, which was presented with a randomly selected picture of a counselor that was pre-ranked according to body size and a written description, “ad,” for the counselor pictured. The online versions of these questionnaires were created by the investigator using Qualtrics. The order of presentation of the BIS–Brief and the picture with CRF–S was counterbalanced such that all participants received both measures, but in different orders. Participants were randomly assigned to the order of measures.

For the CRF–S task, the participant was shown a picture of a counselor with an accompanying written description of the counselor and all of the CRF–S questions on one page. The written description was the same for each of the images. The participant was instructed to examine the ad for the counselor and complete the CRF–S questions. In total, the participant was presented with one picture of a counselor, either male or female, representing one of the body sizes, and was asked to complete all CRF–S questions for the picture. Participants were randomly assigned to a pictured model. For the BIS–Brief task, all of the questions and the instruction set were presented simultaneously on one page. Finally, participants were asked to complete the demographic questionnaire.

The total time spent by each participant was expected to be five to ten minutes. Actual durations recorded by Qualtrics ranged from one minute to hours or days, given that participants could leave the survey on their browser and work on it intermittently. Following their completion of all instruments, participants were shown an online debriefing where they learned further details regarding the nature of the study (see Appendix G). They were thanked for their participation, provided with contact information for a national crisis hotline, and encouraged to seek therapeutic services if, upon completion of the survey, they felt distressed. Participants were provided with a code that they entered on the MTurk.com website in order to receive

compensation. All participants who entered valid codes (i.e., the code provided matched a code generated by Qualtrics) in the MTurk.com website were compensated within 48 hours. After one month, the posting on MTurk.com expired and the survey was closed.

Once the survey was closed, the investigator downloaded the raw data directly from Qualtrics into the Statistical Package for the Social Sciences (SPSS). Missing data points including one CRF-S data point, three height data points, and two weight data points were all replaced using the Series Mean method. One individual was dropped from analyses due to too much data missing on the BIS-Brief. BMI and total scores on the CRF-S and the BIS-Brief were computed for each participant. Furthermore, the participants were categorized based on the body size (i.e., largest, second largest, second smallest, smallest) of the model that they were shown and the gender of the model that they were shown. This information was entered into SPSS prior to data analysis and the number of participants categorized to each group can be found in Table 4.

### **Data Analytic Strategy**

First, descriptive statistics were conducted on the demographic data collected in the survey and a Chi Square was used to determine if demographic differences existed across groups. Next, reliability coefficients (Cronbach's Alpha) of the CRF-S and BIS-Brief were examined to determine acceptability for inclusion in analyses. Thirdly, linearity, normality, and homogeneity of the data were examined to determine acceptability for inclusion in a hierarchical regression. Next, hierarchical regression analyses were used to test all hypotheses in the investigation. Finally, a one-way ANOVA was used to explore if participants preferred more average sized counselors over counselors with more extreme body weights. Bonferroni post hoc tests were used to determine if participants rated counselor in the two mid-sized ranges (second

smallest and second largest) as more competent than counselors in the more extreme weight categories (largest and smallest).

Table 4

*Number of Participants Randomly Assigned to Each Model and Mean CRF-S Score of Model*

Model	<i>n</i>	%	Mean CRF-S Score
Largest Male	46	14.98	61.01
Largest Female	39	12.70	58.64
Second Largest Male	47	15.31	57.81
Second Largest Female	31	10.10	60.61
Second Smallest Male	32	10.42	57.34
Second Smallest Female	34	11.07	61.32
Smallest Male	36	11.73	63.22
Smallest Female	42	13.68	64.45

### Summary

This investigation was designed to explore whether or not difference existed in a competency-related criterion variable based on the predictor variable and its interaction with the moderator variables. More specifically, the criterion variable was the overall CRF–S score for each pictured counselor, the predictor variable was the body size of the pictured counselor (four levels: smallest, second smallest, second largest, largest), and the moderator variables were the self-reported impulsivity of the participant (i.e., BIS–Brief total score) and the gender of the pictured counselor. These variables and the interaction effects between the predictor and moderator variables (i.e., counselor gender/counselor size interaction, counselor size/participant

impulsivity interaction, and counselor gender/counselor size/participant impulsivity interaction) were examined using hierarchical regression analyses.

## CHAPTER IV. RESULTS

### **Overview**

The results of the analyses run to test each of the three hypotheses presented are reported in the following chapter. All hypotheses were tested using hierarchical regression analyses. Although hierarchical regression is a robust analysis to moderate violations of the assumptions of regression (Ross & Shannon, 2008), each of the underlying assumptions (i.e., independence of the predictor variables, linearity, normality, and homogeneity of variance) were examined to determine if any violations occurred. The assumptions of multiple regression were met for all variables added to the hierarchical regressions in this investigation. Additionally, due to the fact that interactions between predictor variables were tested in this investigation, each of the predictor variables, as appropriate, were centered to avoid the increased multicollinearity that occurs amongst the variables when interaction terms are created.

### **Descriptive Statistics**

Each participant was assigned to one model size group (i.e., largest, second largest, second smallest, smallest). Chi Square analysis was used to determine if demographic differences existed across groups. No significant between-group differences were found. Results of the Chi Square are displayed in Table 5.

Table 5

*Descriptive Statistics and Chi Square Results, Demographic Differences Between Groups*

Demographic Variable	$\chi^2$	df	Sig.
BMI Category <sup>a</sup>	22.722	21	.359
Marital Status	35.965	42	.732
In therapy at time of study	3.798	7	.803
Race/Ethnicity	39.779	42	.569

<sup>a</sup>Underweight, normal weight, overweight, or obese

### Reliability Statistics

Each participant rated their own impulsivity using the BIS–Brief and the competency of the counselor using the CRF–S. The reliability of both measures was examined in order to determine acceptability for inclusion in analyses. Both measures were found to have good internal consistency and were included in the analyses. For this study, the CRF–S was found to have good internal consistency ( $\alpha > 0.9$ ) for each presented model. The internal consistency values for the CRF–S total score found in this study are consistent with previously reported values ( $.89 < \alpha < .97$ ; Constantine, 2007; Guinee & Tracey, 1997; Harari & Waehler, 1999; Tracey, Glidden, & Kokotovic, 1988). Specific alpha values for the CRF–S for each sample group are delineated in Table 6. For this study, the BIS–Brief was shown to be internally consistent ( $\alpha = 0.848$ ) and exceeded the previously reported internal consistency of the measure ( $\alpha = .78$ ; Steinberg et al., 2013). A comparison of the reliability statistics found for each measure in this study and the reliability found for those measures in the literature can be found in Table 7.

Table 6

*Reliability Coefficients for the CRF–S by Sample Group*

Sample Group	$\alpha$
Largest Male	.939
Largest Female	.952
Second Largest Male	.954
Second Largest Female	.915
Second Smallest Male	.951
Second Smallest Female	.924
Smallest Male	.946
Smallest Female	.928

Table 7

*Comparison of Cronbach's Alpha*

	Current Sample-Data	Established Reliability
CRF–S	.915-.954	.89-.97 <sup>a</sup>
BIS–Brief	0.848	.78 <sup>b</sup>

<sup>a</sup> Constantine, 2007; Guinee & Tracey, 1997; Harari & Waehler, 1999; Tracey, Glidden, & Kokotovic, 1988

<sup>b</sup> Steinberg et al., 2013

### Simple Correlations between Variables

The predictor variables for the current investigation were model size, participant impulsivity (BIS–Brief total score), and model gender. The criterion variable for the present

study was counselor competency (CRF–S total score) as rated by the participant. Correlations were computed between each variable involved in this study as well as the demographic variable participant BMI, which was calculated by the height and weight values provided by the participant (see Table 8).

Significant negative correlations were found between counselor competency (CRF–S) and both participant impulsivity (BIS–Brief;  $r = -.181, p < .01$ ) and model size ( $r = -.129, p = .024$ ), such that higher levels of counselor competency were related to lower levels of participant impulsivity and smaller counselor body sizes. Moreover, a significant positive correlation was found between participant impulsivity (BIS–Brief) and participant BMI ( $r = .276, p < .01$ ), such that higher levels of self-reported impulsivity were related to higher participant BMI. When data from participants who reported a history of disordered eating was removed from the analyses, similar results were obtained. Table 8 contains a correlation matrix listing correlations between each variable for all participants. The correlations were also explored separately for each group of participants (i.e., which model size the participant was shown). Tables 9 through 12 contain the correlation matrixes for the separate groups listing correlations between each variable. The significant positive correlation between participant impulsivity and participant BMI found in the whole sample was significant only for those participants who viewed the largest models ( $r = .283, p < .01$ ) and the smallest models ( $r = .509, p < .01$ ) when the participants were broken down according to group. The significant negative correlation between counselor competency and participant impulsivity found in the whole sample was significant only for those participants who viewed the smallest models ( $r = -.323, p < .01$ ) when the participants were broken down according to group.

Table 8

*Correlation Matrix for the Intercorrelations between Study Variables for all Participants*

	M	SD	2	3	4	5
1 CRF-S	60.65	11.25	-.181**	.071	-.129*	-.078
2 BIS-Brief	14.56	4.09	--	-.082	.042	.276**
3 Model Gender	.48	.50		--	-.076	-.068
4 Model Size	2.55	1.15			--	-.110
5 Participant BMI	27.36	8.55				--

\*p &lt; .05; \*\*p &lt; .01

Table 9

*Correlation Matrix for the Intercorrelations between Study Variables for Participants Who Saw the Largest Models*

	M	SD	2	3	4
1 CRF-S	59.92	10.30	-.052	-.115	-.198
2 BIS-Brief	14.82	4.21	--	.011	.283**
3 Model Gender	.46	.50		--	.008
4 Participant BMI	26.13	6.37			--

Note. Model size has been removed as a variable because all models are of the same size for this group.

\*p &lt; .05; \*\*p &lt; .01

Table 10

*Correlation Matrix for the Intercorrelations between Study Variables for Participants Who Saw the Second Largest Models*

	M	SD	2	3	4
1 CRF-S	59.13	11.84	-.201	.122	-.027
2 BIS-Brief	14.67	4.17	--	-.210	.053
3 Model Gender	.41	.50		--	-.033
4 Participant BMI	27.30	8.06			--

Note. Model size has been removed as a variable because all models are of the same size for this group

\* $p < .05$ ; \*\* $p < .01$

Table 11

*Correlation Matrix for the Intercorrelations between Study Variables for Participants Who Saw the Second Smallest Models*

	M	SD	2	3	4
1 CRF-S	59.39	10.95	-.130	.183	-.075
2 BIS-Brief	14.20	3.42	--	-.050	.194
3 Model Gender	.52	.50		--	-.070
4 Participant BMI	27.23	8.82			--

Note. Model size has been removed as a variable because all models are of the same size for this group

\* $p < .05$ ; \*\* $p < .01$

Table 12

*Correlation Matrix for the Intercorrelations between Study Variables for Participants Who Saw the Smallest Models*

	M	SD	2	3	4
1 CRF-S	64.04	11.42	-.323**	.067	-.111
2 BIS-Brief	14.47	4.42	--	-.070	.509**
3 Model Gender	.54	.50		--	-.171
4 Participant BMI	28.87	10.55			--

Note. Model size has been removed as a variable because all models are of the same size for this group

\* $p < .05$ ; \*\* $p < .01$

As mentioned previously, the CRF-S measure also included the question, “How likely would you be to go to this counselor?” Participants responded to the question using the same seven-point Likert scale, but the response was not calculated into the total score of the instrument. Therefore, a simple correlation was used to determine the relationship between participants’ responses to this question and the overall competency score assigned to the counselor. As would be expected, the two factors were found to be significantly positively correlated ( $r = .659, p < .01$ ), which indicates that increased competency ratings are related to increased self-reported likeliness to see the counselor. Because these related indicators of perceptions of counselors were sufficiently distinct (with less than half of the variance shared between the two indicators), additional analyses were conducted to evaluate the potential group differences in likelihood of seeing a counselor. The main analyses included only competency ratings, which have more known psychometric properties than the single item asking the likelihood of seeing a counselor.

### Model Size Predicting Counselor Competency Scores

Model size was hypothesized to significantly predict counselor competency scores with larger model size hypothesized to relate to lower counselor competency scores. This hypothesis was tested along with the second hypothesis (see below) using one hierarchical regression. First, counselor body size (i.e., largest, second largest, second smallest, smallest) was entered into step one of the regression. Table 13 displays the standardized regression coefficient ( $\beta$ ), total  $R^2$  (i.e., amount of variance in the criterion variable accounted for by the predictor variable or variables), and the semipartial correlations ( $sr$ ) for each model and predictor variable in the regression when

Table 13

*Hierarchical Regression Analysis for Model Size and Participant Impulsivity (BIS–Brief) in Predicting Counselor Competency Scores*

	$\Delta R^2$	$\beta$	$sr$
Step 1	.016*		
Model Size		-.127*	-.127
Step 2	.029**		
Model Size		-.121*	-.121
BIS–Brief		-.170**	-.170
Step 3	.009		
Model Size x BIS–Brief		.217	.093
Total $R^2$	.054		

\* $p < .05$  \*\* $p < .01$

all participant data was included. Table 14 displays the standardized regression coefficient ( $\beta$ ), total  $R^2$  (i.e., amount of variance in the criterion variable accounted for by the predictor variable

Table 14

*Hierarchical Regression Analysis for Model Size and Participant Impulsivity (BIS–Brief) in Predicting Counselor Competency Scores Excluding Data from Participants with a Self-Reported History of Disordered Eating*

	$\Delta R^2$	$\beta$	<i>sr</i>
Step 1	.014*		
Model Size		-.120*	-.120
Step 2	.032**		
Model Size		-.109	-.109
BIS–Brief		-.180**	-.178
Step 3	.023**		
Model Size x BIS–Brief		.358**	.151
Total $R^2$	.069		

\* $p < .05$  \*\* $p < .01$

or variables), and the semipartial correlations (*sr*) for each model and predictor variable in the regression when data from participants with a history of disordered eating was excluded. As was hypothesized, model size significantly predicted counselor competency scores, with model size accounting for 1.6% of the variance in counselor competency scores ( $\Delta R^2 = .016$ ;  $F(1, 304) = 4.976$ ,  $p = .026$ ). When data from participants with a history of disordered eating was removed from the analysis, model size continued to significantly predict counselor competency scores, but

accounted for slightly less (1.4%) of the variance in counselor competency scores ( $\Delta R^2 = .014$ ;  $F(1, 286) = 4.193, p = .042$ ) than when these participants' data was included in the analysis. A significant negative relationship was found between model size and counselor competency scores, such that models with larger body sizes were rated as being less competent ( $\beta = -.127, p = .026$ ). This relationship continued to be significant in the negative direction when data from participants with a history of disordered eating was removed from the regression analysis ( $\beta = -.120, p = .042$ ).

### **Participant Impulsivity as a Moderator**

In the second hypothesis, participants' self-reported impulsivity was hypothesized to moderate the relationship between model size and counselor competency ratings. More specifically, the significance of the relationship between perceived counselor body size and perceived competency was hypothesized to be greater at higher levels of participant impulsivity. This hypothesis, along with the first hypothesis (see above), was tested using one hierarchical regression. Participant impulsivity was entered into the hierarchical regression equation in step two, a step that was also used to test whether or not participant impulsivity predicts counselor competency ratings after controlling for model size. In the third step, the interaction term between the two variables (i.e., counselor body size and participant impulsivity) was entered into the regression model. Beta weights were examined for participant impulsivity and the interaction term for participant impulsivity and counselor body size when added to the prediction model. Shown in Table 13 are the standardized regression coefficient ( $\beta$ ), total  $R^2$  (i.e., amount of variance in the criterion variable accounted for by the predictor variable or variables), and the semipartial correlations ( $sr$ ) for each model and predictor variable in the regression when all participant data was included. Table 14 displays the standardized regression coefficient ( $\beta$ ), total

$R^2$  (i.e., amount of variance in the criterion variable accounted for by the predictor variable or variables), and the semipartial correlations ( $sr$ ) for each model and predictor variable in the regression when data from participants with a history of disordered eating was excluded.

Participant impulsivity significantly predicted counselor competency ratings after controlling for model size with participant impulsivity accounting for an additional 2.9% of the variance in counselor competency ratings ( $F(2,303) = 7.147, p = .003$ ). The negative Beta weight for impulsivity in the model containing both impulsivity and model size in predicting ratings of counselor competency ( $\beta = -.170, p = .003$ ) indicates that as participant impulsivity increased, counselor competency ratings decreased. This relationship did not change when data from participants who reported a history of disordered eating was excluded from the model. Furthermore, although the overall model containing both predictor variables (i.e., model size and participant impulsivity) remained significant ( $\Delta R^2 = .032, F(2,285) = 6.878, p = .002$ ) when participants with a history of disordered eating were removed from the analyses, model size ( $\beta = -.109, p = .060$ ) did not account for a significant amount of unique variance when impulsivity was added to the prediction model ( $\beta = -.178, p = .002$ ).

Prior to examining the interaction effects, each of the predictor variables, as appropriate, were centered to avoid the increased multicollinearity that occurs amongst the variables when interaction terms are created. The addition of the interaction between model size and participant impulsivity did not add significantly to the model ( $\Delta R^2 = .009, F(3,302) = 5.710, p > .05$ ) when data from all participants was included in the model and, since the interaction term was not significant ( $\beta = .215, p = .104$ ), the relationship between model size and counselor competency scores did not statistically differ as a function of participant impulsivity. However, when data from participants who reported a history of disordered eating was removed from the analysis, the

addition of the interaction between model size and participant impulsivity added significantly to the model ( $\Delta R^2 = .023$ ,  $F(3,284) = 7.003$ ,  $p = .009$ ), indicating that when participants with a history of disordered eating are excluded from analyses the relationship between model size and counselor competency scores statistically differed as a function of participant impulsivity. See Figure 1 for a graphical representation of the interaction.

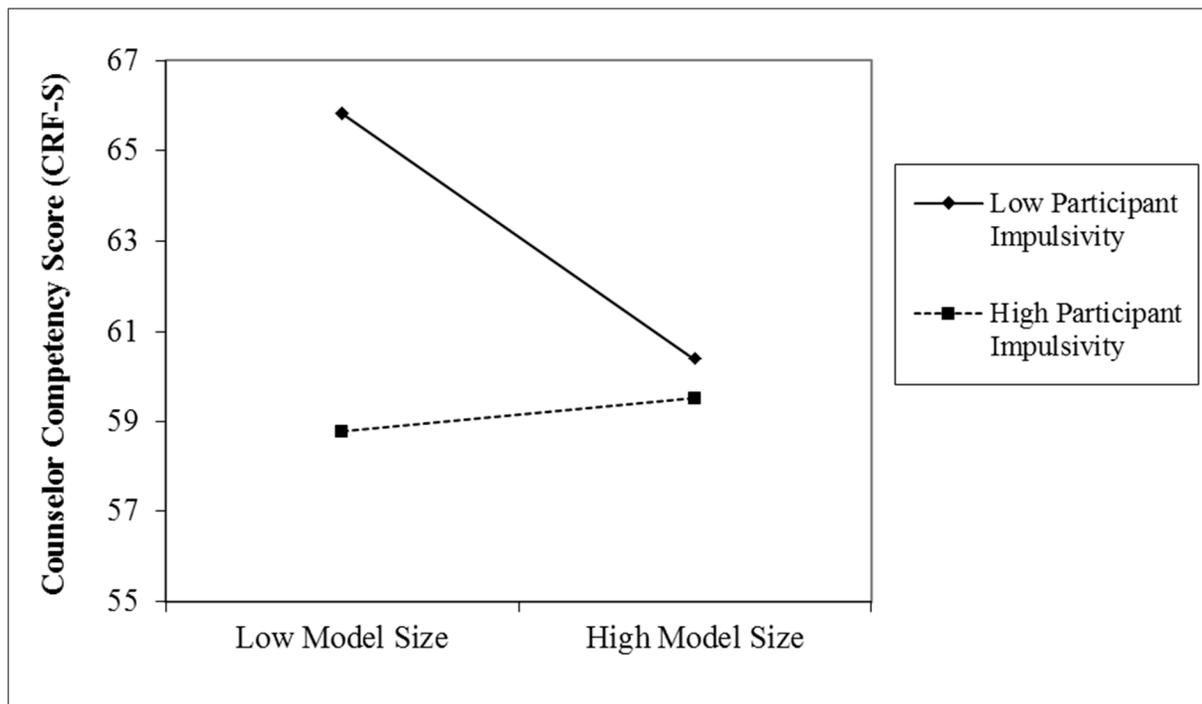


Figure 1. Graph showing the interaction between participant impulsivity (BIS–Brief scores) and model size in predicting counselor competency (CRF–S) scores.

In order to further explore the interaction effect, a test for difference in simple slopes was used after participants with any eating disorder status were excluded from analyses. This analysis indicated a significant difference in the slope at low (one standard deviation below the mean) levels of participant impulsivity ( $t = -3.219$ ,  $p = .001$ ), but no significant difference in the

slope at high (one standard deviation above the mean) levels of participant impulsivity ( $t = .438$ ,  $p = .662$ ). Thus, participant impulsivity significantly moderated the relationship between counselor competency (CRF-S) and counselor body size. Specifically, model size and counselor competency score (CRF-S) are not significantly related for the more highly impulsive group of participants. Whereas, for the less impulsive group, there is a significant negative relationship between counselor competency score (CRF-S) and model size. In other words, there is no significant difference in the competency scores (CRF-S) obtained between large (one standard deviation above the mean) and small (one standard deviation below the mean) models when the models are being rated by individuals who identify themselves as more impulsive (one standard deviation above the mean). However, when being rated by individuals who identify themselves as less impulsive (one standard deviation below the mean), smaller models are rated as significantly more competent than larger models. Although a significant interaction was found, it was not in the direction hypothesized (it was expected that the effect would occur for individuals with higher levels of impulsivity in contrast to the finding that the effect exists among individuals lower in impulsivity).

### **Model Gender as a Moderator**

In the third hypothesis, model gender was hypothesized to moderate the relationship between model size and counselor competency ratings. More specifically, the significance of the relationship between perceived counselor body size and perceived competency was hypothesized to be greater for female models than for male models. This hypothesis was tested using a second hierarchical regression. In the first step, the two predictor variables (i.e., model size and model gender) were entered into the regression model and in the second step the interaction between the two variables (i.e., model size and model gender) was entered to test for moderation. Table 15

displays the standardized regression coefficient ( $\beta$ ), total  $R^2$ , and the semipartial correlations ( $sr$ ) for each step and predictor variable in the regression model for all participant data. Table 16

Table 15

*Hierarchical Regression Analysis for Model Size and Model Gender in Predicting Counselor Competency Scores for All Participants*

	$\Delta R^2$	$\beta$	$sr$
Step 1	.020*		
Model Size		-.124*	-.123
Model Gender		.061	.061
Step 2	.005		
Model Size x Model Gender		-.180	-.070
Total $R^2$	.025		

\* $p < .05$  \*\* $p < .01$

Table 16

*Hierarchical Regression Analysis for Model Size and Model Gender in Predicting Counselor Competency Scores for Participants without a History of Disordered Eating*

	$\Delta R^2$	$\beta$	$sr$
Step 1	.016		
Model Size		-.112	-.111
Model Gender		.052	.051
Step 2	.007		
Model Size x Model Gender		-.210	-.083
Total $R^2$	.023		

\* $p < .05$  \*\* $p < .01$

displays the standardized regression coefficient ( $\beta$ ), total  $R^2$ , and the semipartial correlations ( $sr$ ) for each step and predictor variable in the regression model when data from participants with a history of disordered eating was excluded from the analyses.

Hypothesis three was not supported. The addition of the interaction between model size and model gender did not add significantly to the model ( $\Delta R^2 = .005$ ,  $F(3,303) = 2.605$ ,  $p = .052$ ). Since the interaction term was not significant ( $\beta = -.180$ ,  $p = .219$ ), the relationship between model size and counselor competency scores did not statistically differ as a function of model gender. The model and interaction term were not significant when the data from participants who reported a history of disordered eating was removed from the analyses. In other words, gender did not moderate the relationship between model size and rated counselor competency.

#### **Interaction between Model Gender, Model Size, and Participant Impulsivity**

A third hierarchical regression was used in order to test whether or not model size, model gender, and participant impulsivity would interact to predict counselor competency ratings (i.e., three-way interaction effects). In the first step, the three predictor variables (i.e., model size, participant impulsivity, and model gender) were entered into the regression model. In the second step, each two-way interaction term (i.e., participant impulsivity by model size, participant impulsivity by model gender, and model gender by model size) was entered. Next, the three-way interaction between model size, participant impulsivity, and model gender was added to the regression. Table 17 displays the standardized regression coefficient ( $\beta$ ), total  $R^2$ , and the semipartial correlations ( $sr$ ) for each step and predictor variable in the regression model for all participants and Table 18 displays the standardized regression coefficient ( $\beta$ ), total  $R^2$ , and the

semipartial correlations ( $sr$ ) for each step and predictor variable in the regression model for participants without a history of disordered eating.

Table 17

*Hierarchical Regression Analysis for Interactions between Model Size, Model Gender, and Participant Impulsivity in Predicting Counselor Competency Scores for All Participants*

	$\Delta R^2$	$\beta$	$sr$
Step 1	.047**		
Model Size		-.117*	-.117
Model Gender		.049	.049
BIS–Brief		-.167**	-.166
Step 2	.016		
Model Size		-.057	-.040
Model Gender		.184	.075
BIS–Brief		-.263	-.094
Model Size x Model Gender		-.157	-.061
Model Size x BIS–Brief		.169	.069
Model Gender x BIS–Brief		-.086	-.062
Step 3	.000		
Model Size x Model Gender x BIS–Brief		.052	.019
Total $R^2$	.064		

\* $p < .05$ ; \*\* $p < .01$

Table 18

*Hierarchical Regression Analysis for Interactions between Model Size, Model Gender, and Participant Impulsivity in Predicting Counselor Competency Scores for Participants without a History of Disordered Eating*

	$\Delta R^2$	$\beta$	<i>sr</i>
Step 1	.048**		
Model Size		-.106	-.105
Model Gender		.043	.043
BIS–Brief		-.176**	-.175
Step 2	.032*		
Model Size		-.029	-.021
Model Gender		.212	.088
BIS–Brief		-.408*	-.143
Model Size x Model Gender		-.198	-.078
Model Size x BIS–Brief		.312*	.126
Model Gender x BIS–Brief		-.075	-.054
Step 3	.000		
Model Size x Model Gender x BIS–Brief		-.059	-.020
Total $R^2$	.080		

\* $p < .05$ ; \*\* $p < .01$

When all main effects were entered into the regression model, the amount of variance in counselor competency ratings accounted for by the prediction model was significant ( $\Delta R^2 = .047$ ,

$F(3,302) = 5.013, p = .002$ ) and remained significant when data from participants who reported a history of disorder eating was removed ( $\Delta R^2 = .048, F(3,284) = 4.764, p = .003$ ). Moreover, although the amount of variance in counselor competency ratings accounted for by the prediction model that included all main effects and simple interactions was not significant when data from all participants was used ( $\Delta R^2 = .016, F(6,299) = 3.396, p = .158$ ), the model was significant when data from participants who reported a history of disorder eating was removed ( $\Delta R^2 = .032, F(6,281) = 4.075, p = .022$ ). Finally, the addition of the three-way interaction between model size, participant impulsivity, and model gender did not add significantly to the model when it was run with data from all participants ( $\Delta R^2 = .000, F(7,298) = 2.918, p = .739$ ) or when it was run after excluding the data from participants who reported a history of disordered eating ( $\Delta R^2 = .000, F(7,280) = 3.500, p = .722$ ). Since the interaction term did not add a significant amount of variance accounted for within the model for either the entire sample or the sample with participants who reported a history of disordered eating removed, model size, model gender, and participant impulsivity did not significantly interact to predict counselor competency ratings.

In the model used to examine the three-way interaction effects, there was evidence of suppression for model gender. Specifically, the model gender semi-partial correlation in step two ( $sr = .075$ ) was larger than the size of the direct correlation between model gender and counselor competency (CRF-S score;  $r = .071$ ) when data from all participants was used and when data from participants with a history of disordered eating was excluded ( $sr = .088, r = .060$ ). In other words, there was suppression for model gender in step two (main effects and simple interactions) of the third regression model.

### Preference for an Average Sized Counselor

According to Vocks, Legenbauer, and Peters (2007), participants reported a significant preference for average sized counselors. Therefore, in order to determine if this was supported in this study, a one-way ANOVA was used to examine the difference in counselor competency (CRF-S score) across counselor body size. When data from participants with a history of disordered eating was removed from the analysis, CRF-S scores were not significantly different across counselor body size ( $F(3,285) = 2.206, p = .088$ ). However, when data from all participants was included in the analysis, CRF-S scores were significantly different across counselor body size ( $F(3,303) = 3.220, p = .023$ ). Bonferroni post hoc analyses showed that the smallest counselors were rated as significantly ( $p = .034$ ) more competent ( $M = 6.8846, SD = 11.41539$ ) than the second largest counselors ( $M = 58.9231, SD = 11.81873$ ). No other significant differences were found and the hypothesis that clients may prefer a more average sized counselor was not supported, which suggests that there may be differences in what clients explicitly report they prefer (i.e., Vocks, Legenbauer, & Peters, 20007) and their implicit preferences. Results of the Bonferroni test are presented in Table 19. To further evaluate preference of averaged sized counselors, an ANOVA on responses to the CRF-S item regarding willingness to go to the counselor was used to explore differences as a function of model size. This ANOVA was not significant; there were no significant difference across counselor body size in how willing a participants reported being to go to the pictured counselor when all participant data was included ( $F(3, 303) = 1.114, p = .344$ ) or when participants with a history of disordered eating where excluded from the analyses ( $F(3, 285) = .951, p = .417$ ).

Table 19

*Bonferroni Results, CRF-S score differences Between Groups*

Group	Comparison Groups	Mean Difference	Std. Error	Sig.
Smallest	Second Smallest	4.49068	1.86042	.098
	Second Largest	4.96154	1.78122	.034*
	Largest	3.96200	1.74416	.143
Second Smallest	Second Largest	.47086	1.86042	1.000
	Largest	-.52867	1.82498	1.000
Second Largest	Largest	-.99954	1.74416	1.000

\* $p < .05$

## CHAPTER V. DISCUSSION

### **Meaning and Interpretation of Findings**

The purpose of this investigation was to examine the relationship between counselor body size and how competent the counselor is perceived to be. Furthermore, variables that might affect the relationship between counselor body size and counselor competency scores, including counselor gender and client impulsivity, were investigated. The sample for the present study consisted of mostly Caucasian individuals ranging in age from 19 to 72. Approximately half (51.8%) of the sample had prior experience with counseling or psychotherapy. As such, when examining the findings that counselor body size is related to counselor competency scores, it is important to consider that the participants in this study knew in advance that they would not be receiving therapeutic services from the pictured counselor. Therefore, participants may have rated the counselors differently (i.e., looked for different features in the model or ad) than they might rate a counselor who is providing (or would potentially provide) services to them.

As would be expected based on the literature (e.g., Hash et al., 2003; Wiggins, 1980), counselor body size predicted the competency ratings assigned to the pictured counselor with larger counselors receiving lower competency scores. The relationship between counselor body size and counselor competency did not depend upon counselor gender. In other words, larger counselors of both genders are likely to receive lower competency ratings than their smaller counterparts.

The relationships between counselor body size and counselor competency was relatively small, with counselor body size accounting for only 1.7% of the variance in counselor competency ratings in the entire sample and only 1.4% of the variance when data from participants with a history of disordered eating was removed. This finding is consistent with past research. For example, Wiggins (1980) previously found that counselor body size was negatively correlated with counselor competency scores. The present study replicates and extends the findings of Wiggins (1980) among a sample of individuals who, unlike the participants in the Wiggins (1980) study, are not employed or in training in the field of psychology, social work, or counseling. Although some past literature supports the current results, not all previous examinations of the constructs of counselor body size and counselor competency scores have shown a significant relationship (McKee & Smouse, 1983). The present study differs from the McKee and Smouse (1983) study in regards to how counselor body size was defined. In the McKee and Smouse (1983) study, there were only two body size conditions, overweight and normal weight. Furthermore, the overweight condition was defined as “an individual with an obviously soft, round physique whose weight was approximately 50 pounds above the recommended weight according to standard weight charts” (McKee & Smouse, 1983, p. 334). The use of counselors from only two body size categories and a failure to include counselors from the more extreme body size categories (e.g., obese) may have restricted the range in counselor body size, accounting for the lack of significant findings.

Although the relationship remained significant, this study found the relationship between counselor body size and counselor competency scores to be smaller (i.e., a smaller standardized  $\beta$  value and less variance in counselor competency scores accounted for) when data from participants with a history of disordered eating was removed from the analyses. This is

consistent with prior research, which has identified counselor body size as a variable of significant importance to individuals with a history of disordered eating (Vocks et al., 2007). The results also suggest that, although the relationship may be larger for individuals who report a history of disordered eating, the relationship between counselor body size and counselor competency scores continues to be significant for individuals without a history of disordered eating as well. It is important to note, however, that the percentage of the sample who reported a history of disordered eating was small (5.9%) and it is not possible to draw accurate conclusions or make hypotheses about the population of people with current or historical disordered eating based on this data.

Despite the noted significant relationship between counselor body size and counselor competency scores for both participants with a history of disordered eating and those without, counselor gender, a variable presumably related to counselor physical appearance (Burmeister et al., 2013; Miller & Lundgren, 2010; Schvey, Puhl, Levandoski, & Brownell, 2013), was not found to be significantly related to counselor competency scores. Furthermore, counselor gender was not found to significantly predict competency scores received by a counselor and was not found to significantly impact the relationship between counselor body size and counselor competency scores. Therefore, hypothesis three was not supported. This is consistent with prior research, which found that the gender of the target was not an important factor in the relationship between a target's perceived body size and evaluations of the target by a rater (Cash & Kehr, 1978; Harris et al., 1982; Paradise, Cohl, & Zweig, 1980; Wiggins, 1980). This study replicates and extends the findings of the earlier studies in today's cultural milieu. The present study differs from research that has found women to be held more stringently to physical appearance standards in regards to how physical appearance was defined. Earlier studies (Burmeister et al.,

2013; Miller & Lundgren, 2010; Schvey, Puhl, Levandoski, & Brownell, 2013) have used a more inclusive definition of physical appearance such as, for example, attractiveness, which may include additional variables (e.g., facial symmetry) in addition to body size. In contrast, this study was specifically designed to explore one facet of physical appearance (i.e., body size) rather than examining physical appearance more generally (e.g., hair color, attractiveness, clothing style, etc.). The inclusive definition of physical appearance (i.e., including factors other than body size) used in other studies may have contributed to the findings that women are held more stringently to physical appearance standards than men. Stated another way, it is possible that women are held more stringently than men to physical appearance standards other than body size (e.g., attractiveness) and the inclusion of such variables in the examination of physical appearance may account for the significant findings in other studies.

It is possible that participant variables, as opposed to other counselor demographic variables, interact with counselor body size to predict counselor competency scores. Prior research has found that stereotypes (e.g., about obesity) are more likely to be activated when the trait (e.g., obese body size) related to the stereotype is salient to the situation (Kahneman, 2003; Krieglmeier & Sherman, 2012; Macrae & Bodenhausen, 2000). Given the prominent social link between obesity and impulsivity (APA, 2013; Cohen et al., 2005; Klaczynski et al., 2004; Puhl & Brownell, 2001), it was hypothesized that obesity and its related stereotype of impulsivity will be salient to individuals with higher levels of impulsivity, thus resulting in increased likelihood of stereotype activation. It was expected that this line of reasoning could be extended to a therapeutic setting. In that case, individuals who present for counseling and perceive themselves as highly impulsive would be more likely to experience stereotype activation in the presence of an overweight or obese counselor than would clients who perceive themselves as less impulsive

(hypothetically due to the increased salience of impulsivity, and thus body size, and concomitant increased likelihood of stereotype activation). Although this study specifically explored participant impulsivity and high and low levels of impulsivity are referenced, there are no empirically supported cutoff values representing clinically significant or impairing levels of impulsivity. No studies specifically examining the effect of the interaction between rater impulsivity and target body size on overall evaluations of a target were found.

Unexpectedly, the findings of the present study suggest an interaction, but not in the direction hypothesized. Participant impulsivity was found to be related to counselor competency scores and was shown to predict counselor competency scores above and beyond counselor body size. When added to a regression model containing counselor body size, participants' self-reported impulsivity added significantly to the model. Thus, in contrast to the hypothesis which asserts that participant impulsivity will moderate the relationship between counselor body size and counselor competency scores, participant impulsivity appears to be independently related to counselor competency scores and is able to predict, independent of counselor body size, counselor competency scores. Specifically, the relationship between counselor competency scores and participant impulsivity was negative, meaning that higher levels of participant impulsivity are associated with lower counselor competency scores. The counselors in this study were rated, overall, towards the higher end of the competency scale. It may be that participants who described themselves as being more impulsive tended to respond quicker to measures and to focus their ratings more toward the center of the rating scale. Alternatively, it may be that individuals higher in impulsivity, rate multiple things less positively than those low in impulsivity. Specific explanations for the relationship are beyond the scope of this study.

When analyses were run without data from participants without a history of disorder eating, participant impulsivity was shown to interact with counselor body size to predict counselor competency scores. Specifically, for participants without a history of disordered eating, a significant negative relationship between counselor competency and counselor body size was found for participants with a low self-reported level of impulsivity such that smaller models were rated as significantly more competent than larger models. No significant relationship was found between the two variables for participants with a high self-reported level of impulsivity. This finding is inconsistent with the hypothesis that participant impulsivity would moderate the relationship between counselor body size and counselor competency score such that the relationships would be stronger for individuals who reported higher levels of impulsivity. Specifically, it is inconsistent with the direction of the hypothesized moderation effect and the reasoning behind the hypothesized effect. It is possible that individuals who reported high levels of impulsivity were impulsive in their ratings of the pictured counselor and, therefore, tended to rate the counselor without examining the picture. In other words, in responding quickly, they may have attended less to the content of the competency rating form, instead, opting to select a more middle rating to finish the study more quickly. In contrast, individuals who reported lower levels of impulsivity may have been more likely to examine the picture prior to completing the measure and to consider the content of the rating, which resulted in more intentional responding that lead to more variability in ratings, and the resulting significant relationship. Alternatively, the graphical representation suggests that all models, with the exception of the smaller models rated by less impulsive individuals, were rated approximately the same in competency (CRF-S) score. In other words, less impulsive people credited the smaller models with higher competency whereas all other models were rated

approximately the same by both low impulsive and high impulsive participants. Although rated as more competent, results reveal that participants did not identify themselves as being significantly more likely to see the smaller counselors than the larger counselors. Specific explanations for the increase in competency scores assigned to smaller models by less impulsive individuals are beyond the scope of this study.

As mentioned previously, the interaction between participant impulsivity and counselor body size was not significant when data from participants with a history of disordered eating was included in the analysis. It is possible that the participants who reported a history of disordered eating had, on average, higher levels of impulsivity than those without a self-reported history. This is supported by the fact that the mean impulsivity level for the group of participants who reported a history of disordered eating ( $M = 16.06$ ) was higher than the sample mean ( $M = 14.56$ ) and the fact that prior research has shown that counselor body size is significantly important to individuals with a history of disordered eating (Vocks et al., 2007). If this is true, it is possible that, given that significant moderation of the relationship between counselor body size and counselor impulsivity was found at higher levels of impulsivity, inclusion of the highly impulsive individuals (i.e., those with a self-reported history of disordered eating) may have weakened the relationship enough that no significant relationship was found when data from all participants was included in the analysis. It may also be that individuals with a psychological problem that directly relates to body size (e.g., an eating disorder) experience counselors of larger body sizes differently than individuals with other clinical concerns, thus displaying a different pattern between self-reported impulsivity and counselor competency ratings.

When looking more in-depth at the variables that were found to predict counselor competency scores (i.e., counselor body size and participant impulsivity), it is obvious that

participant impulsivity accounted for the largest amount of variance. However, the total variance in counselor competency scores accounted for in this investigation was small and a large amount remains unexplained. Other variables that have previously been examined in the obesity and healthcare literatures (e.g., rater education, rater income, target social status; Harsha et al., 1996; McKee & Smouse, 1983) may directly influence and interact in complex ways to predict counselor competency scores.

Overall, evidence has been established for the predictive ability of counselor body size and rater impulsivity for the construct of counselor competency. In addition, the gender of the counselor being rated was not found to be significantly related to counselor competency scores and did not interact with model size to predict counselor competency. Thus, this study provided unexpected evidence that male and female counselors are rated approximately the same and that men and women are likely both impacted by negative stereotypes related to larger body size. Findings also suggest that there are other variables beyond those examined in this study that may account for counselor competency scores and that researchers should explore additional variables that may predict counselor competency ratings provided by clients.

Additional noteworthy results were found when examining the simple correlations between variables. Specifically, participant BMI was found to be significantly and positively related to participant impulsivity. This is consistent with existing social beliefs about overweight and obese individuals (e.g., people who are obese are more impulsive). Chi Square analyses revealed no significant differences in BMI or impulsivity between the groups and the exploration of this relationship is outside the scope of this study.

## **Limitations**

### **Sampling Bias**

Although this study has the potential to inform researchers and clinicians about the relationship between body size and counselor competency scores, a few limitations should be mentioned. First, the participants were solicited via Amazon Mechanical Turk (MTurk.com). This resulted in a less than random sample as it consisted exclusively of individuals who choose to engage in online tasks for money. It is likely that individuals with low reading levels are not accessing this survey recruitment tool and were not included in the analysis. It should also be noted that the use of the internet may have prevented individuals without internet access from participating in the study. It is hard to know how well the study findings relate to individuals who do not choose to complete tasks online for money or do not have access to a computer and/or the internet. In addition, the sample was limited to adult women. Thus, it is hard to know how the findings may or may not extend to men and younger individuals. Finally, the sample was not representative of the U.S. population, 68.5% of which is classified as obese (Ogden, Carroll, Kit, & Flegal, 2012), in that only 48.2% of the sample provided BMI information that falls into either the overweight or obese category. Thus, it is not clear if a typical U.S. adult would respond in a manner similar to the participants in this study.

### **Methodological**

Two methodological limitations should also be discussed. Due to the use of correlational methods to evaluate some hypotheses, causality can be inferred with regards to the effect of participant (and by extension client) impulsivity on the relationship between counselor size and perceived competency ratings (the use of experimental design for counselor size enables conclusion that size may have a causal relationship with ratings of competencies for counselors).

The results of the investigation are further limited by the use of self-report, which is subjective and lends itself to biased responding. For example, it is not possible to know if participants who rated themselves as highly impulsive engage in impulsive behaviors or if they view themselves as impulsive, but do not engage in impulsive behaviors.

### **Computer-Generated Models**

The models that the participants rated in this study were computer-generated models, which may have impacted the ratings provided by the participants. One participant added the following comment about the model in the box where she entered her completion code: “I didn’t like the image cause it was computer-generated and I thought that was so freaking wrongQ!” [quoted verbatim from participant]. Participants had no opportunity during the survey to provide comments about their impressions of the model and, therefore, it is not possible to know if more than the one participant perceived the models to be computer generated or if the ratings were affected. It is, therefore, possible that the computer generated images used in this study were flawed in a manner similar to the models used in other studies (e.g., appeared unusual at more extreme weights).

The limits within the computer program also may have affected participants’ ratings of counselors’ competency. The clothing style options selected for the model were chosen because they most closely resembled professional dress. However, the clothing options were limited by the software and the results may not extend to counselors who dress in a more professional or a more casual manner than the models presented. Furthermore, there were floor and ceiling weight values imposed by the *Model My Diet* software which may have caused the models to appear more similar in size (e.g., less likely to activate different stereotypes) than if more extreme values were used. Although height and weight values representing each BMI category were

entered, there is no empirical evidence supporting the ability of the *Model My Diet* software to accurately depict specific BMI categories.

In addition to limits of the program used to generate the model pictures, computers used by participants may have introduced additional error. It is possible that the computers of individual participants distorted the presentation of the models in ways that cannot be known due to individual settings on any given computer. Thus, it is not possible to know if the participants viewed models that accurately represented specific BMI categories.

Moreover, participants had limited data points from which to form impressions about the counselors that are not reflective of actual experiences in a first counseling session. Participant was only able to view the model from one angle and was not able to access any additional information about the model that may typically be present during in-person interactions (e.g., tone of voice). Thus, the results of this study may not extend to in-person interactions in which an individual is able to quickly access more individuating information about the counselor and is able to view the counselor's body size and shape from multiple angles. In an attempt to control for this limitation, the participant was informed that the image was from a counselor's online advertisement. However, it is important to note that counselors who post advertisements online typically provide only a headshot photograph and the client is only able to see the counselor's face. Thus, the ad used in this study may have been perceived as unusual and the results may, therefore, not extend to clients who search for their counselor online prior to seeing them in person.

### **Relevance to Clinical Sample**

The majority (91.19%) of the participants in this study reported that they were not engaged in psychotherapy or counseling at the time of the study and 48.2% of the participants

reported that they have never engaged in psychotherapy or counseling. Therefore, the results may not be representative of a clinical population. However, the percentage of the sample who reported having engaged in psychotherapy at some point in their life is significantly higher than what is typically reported for the U.S. population. Furthermore, information about the participants past psychotherapy experience was not collected and it is not possible to determine if the participants in this study are representative of individual who terminate treatment prematurely.

### **Cross-Cultural Relevance**

The current study presented photographed models representing only one race and age-group. Although this methodology prevented the possibility of confounding racial and age factors, it is not possible to extend the results to counselors of other racial backgrounds and ages. While it would be beneficial to examine potential differences in the results based on the racial group or age of the counselor, such research questions are outside the scope of the present study due to limitations on the length of the survey and limited funding.

### **Measures**

This study is further limited by the psychometrics of the measures used. There is limited psychometric data available for the Barratt Impulsiveness Scale-Brief measure used in the present study. However, the measure was designed based on the Barratt Impulsiveness Scale-11 (Patton, Stanford, & Barratt, 1995), which is a widely used and validated measure and one study described this measure as at least psychometrically comparable to the full Barratt Impulsiveness Scale-11 measure (Steinberg, Sharp, Stanford, & Tharp, 2013). Moreover, there are no empirically supported cutoff scores available for the BIS-Brief and it was not possible to determine which participants, if any, reported clinically significant or impairing levels of

impulsivity. Furthermore, research has raised questions about the Counselor Rating Form – Short version. Investigators have suggested the instrument may measure willingness to self-refer to the pictured counselor rather than competency, may experience floor effects, and may be highly influenced by the “good person” or “cooperative subject” response bias (Heppner, Wampold, & Kivlighan, 2008; Ponterotto & Furlong, 1975). However, the measure has been used consistently across the literature (Evans-Jones et al., 2009; Fuertes & Brobst, 2002), and was specifically selected to maintain continuity with prior research related to weight stigma and counseling (McKee & Smouse, 1983; Wiggins, 1980).

### **Implications**

When working with clients, it is important for counselors and therapists to be aware that counselor body size may relate to perceptions of counselor competency, with that larger counselors viewed as less competent. Counselors should be aware of factors that may influence a client’s treatment trajectory and should address variables which may lead to early termination of treatment (i.e., variables that contribute to the client’s belief that a counselor will not be helpful). This research is not suggesting that counselors should work toward changing their bodyweight, but rather that all counselors, regardless of their body size, may find it beneficial in building rapport to discuss with the client what it is like to be working with a counselor of their body size, especially if body size is directly or indirectly relevant to the client’s presenting concern. It is important to ensure that any discussion of such topics be initiated and conducted appropriately and should focus on the client’s experience rather than the therapist’s situation, experience, or personal biases. Until factors that can more comprehensively and accurately predict which variables will best predict treatment outcome are discovered, the best practice for counselors is to

ensure that clients are provided with a safe space to explore their biases, if clients wish, and discuss treatment influencing factors.

Implications also exist for the lack of significant interaction between counselor gender and counselor body size in predicting counselor competency. These results suggest that both men and women may be susceptible to this form of discrimination, but specific conclusions cannot be drawn from this data.

This study has implications for how counselors may address weight bias outside of the counseling session as well. The results of this study are not suggesting that larger sized individuals need to change their appearance or to maintain a normal, as defined by the CDC, bodyweight, but rather suggests that counselors are not immune to the more pervasive social problem of individuals with larger body sizes being discriminated against and reminds counselors that their clients likely also experience discrimination based on body size. It is possible that exploring such biases with clients on an individual case-by-case basis may be helpful, but it may also be important for counselors to pursue social justice by working towards developing protections for larger sized individuals and eradicating the negative social associations between high bodyweight and ability.

### **Future Directions**

Future research is needed to better understand the relationship between counselor body size and counselor competency. Although the current study and Wiggins (1980) identified a significant negative relationship between counselor body size and counselor competency, other investigations (McKee & Smouse, 1983) produced null results. Future research exploring specific differences in the sample selected for study (e.g., participants who are also in the counseling field versus participants who are seeking therapeutic services versus participants from

the general population) may be beneficial in clarifying the significance of the relationship. Furthermore, future research should use standardized methods for presenting the counselor to be rated (e.g., in-person interaction, picture, computer generated model) while also controlling for potentially confounding variables (e.g., attractiveness, clothing style) and may benefit from using a standardized measure of weight/body size (e.g., BMI) rather than subjective determinations about counselor size. The use of such a standardized measure would also allow for the inclusion of various body shapes for each weight/size category, which may be a potentially moderating factor (i.e., people of one body shape may be rated as more competent than people who have the same weight/BMI but are of a different shape).

The participants in this study were informed that they were viewing an online advertisement for a counselor. Future research should further explore online advertisements and may examine which psychologists (e.g., overweight, normal weight, underweight) are most likely to post a picture with their advertisement. Moreover, researchers might investigate which potential clients (based on client characteristics), if any, are more likely to select a counselor if they view a picture of the counselor in the advertisement.

In addition, given the small amount of variance accounted for by body size in counselor competency ratings, researchers may wish to explore whether subsequent activity (e.g., therapeutic interventions, rapport building), and which activity, can offset any negative effects of body size on competency perceptions. Related to this, researchers should also examine how body size and competency ratings relate to client outcomes including decisions to continue therapy with the provider.

Research examining additional variables that may moderate the relationship between counselor competency and counselor body size is also needed. This study specifically examined

the moderating effect of counselor gender and participant impulsivity, but the total variance in counselor competency scores accounted for in this investigation was small and a large amount remains unexplained. Thus, it is likely that additional moderator variables (e.g., participant gender, participant history of disordered eating, counselor race, counselor clothing style) exist and these variables should be explored. As additional moderator variables are identified, it may also be important to utilize measures other than self-report instruments. Using more objective methods of assessing participants for, for example, disordered eating, may be helpful in further elucidating the impact that the variable has on the relationship between counselor competency and body size.

In addition to examining potential moderator variables, additional research is needed to explore the main effects of the moderating variable (i.e., participant impulsivity) examined in this study. Specifically, the results of this study indicated that participant impulsivity was significantly related to counselor competency scores, above and beyond counselor body size. The findings raise the possibility that, in order to better understand how counselor competency is rated, researchers may need to focus on specific client characteristics, notably impulsivity.

Moreover, future research should examine the suppression found in the current study. The result was unexpected and it is not possible to determine the cause at this time. However, now that evidence of the phenomenon has been produced, future studies should attempt to replicate it and examine it more closely.

Counselor competency is multifaceted concept that may be influenced by a number of traits. Thus, future research should explore additional therapist characteristics (e.g., clothing style, race, etc.), that may affect how clients perceive their counselor.

Finally, future research should explore the relationship between counselor body size and counselor competency in diverse populations. Specifically, this study examined the relationship in a sample of people who were, for the most part, not engaged in psychotherapy at the time of the survey. In order to ensure that the findings are relevant in a clinical setting, additional research should examine the relationship in a sample of individuals who are actively engaged in therapy at the time of the study. Moreover, the current investigation specifically explored the relationships between counselor competency and counselor body size using participants only from the United States and the sample obtained was predominately Caucasian. It would be appropriate to explore the relationship using participants from other cultures and to recruit participants from a range of demographic backgrounds (e.g., race/ethnicity, socioeconomic status, age). In addition to examining the relationship between counselor competency and counselor body in size with participants from more diverse demographic backgrounds, it would be useful to explore the impact of counselor race/ethnicity on the relationship between counselor competency and counselor body size. Thus, it might be beneficial for future investigations to request that participants rate counselors from multiple racial backgrounds.

## REFERENCES

- Ackerman, S. J., & Hilsenroth, M. J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review, 23*, 1–33.  
doi:10.1016/S0272-7358(02)00146-0
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- American Psychological Association Center for Workforce Studies. (2014). *2013 APA member profiles*. Retrieved from <http://www.apa.org/workforce/publications/13-member/profiles.pdf>
- Andreyeva, T., Puhl, R., & Brownell, K. D. (2008). Changes in perceived weight discrimination among Americans: 1995-1996 through 2004-2006. *Obesity, 16*, 1129-1134.
- Atkinson, D. R., & Wampold, B. E. (1982). A comparison of the Counselor Rating Form and the Counselor Effectiveness Rating Scale. *Counselor Education and Supervision, 22*, 25-36.
- Barak, A., & LaCrosse, M. B. (1975). Multidimensional perception of counselor behavior. *Journal of Counseling Psychology, 22*, 471-476.
- Barocas, R., & Vance, F. L. (1974). Physical appearance and personal adjustment counseling. *Journal of Counseling Psychology, 21*, 96–100. doi:10.1037/h0036263
- Barratt, E. S. (1959). Anxiety and impulsiveness related to psychomotor efficiency. *Perceptual and Motor Skills, 9*, 191-198.

- Bell, D. C., Montoya, I. D., & Atkinson, J. S. (1997). Therapeutic connection and client progress in drug abuse treatment. *Journal of Clinical Psychology, 53*, 215–224.
- Bernieri, F. J., & Petty, K. N. (2011). The influence of handshakes on first impression accuracy. *Social Influence, 6*, 78–87. doi:10.1080/15534510.2011.566706
- 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? *Preventive Medicine, 57*, 120-124. doi: 10.1016/j.ypmed.2013.05.005
- Bodenhausen, G. V., & Wyer, R. S. (1985). Effects of stereotypes in decision making and information-processing strategies. *Journal of Personality and Social Psychology, 48*, 267-282. doi:10.1037/0022-3514.48.2.267
- Bohner, G., & Dickel, N. (2011). Attitudes and attitude change. *Annual Review of Psychology, 62*, 391 – 417. doi: 10.1146/annurev.psych.121208.131609
- Brogan, M. M., Prochaska, J. O., & Prochaska, J. M. (1999). Predicting termination and continuation status in psychotherapy using the transtheoretical model. *Psychotherapy: Theory, Research, Practice, Training, 36*, 105.
- Brown, R. (2011). *Prejudice: Its social psychology*. West Sussex, United Kingdom: John Wiley & Sons.
- Brudvig, S. & Borna, S. (2012). The effect of pediatricians' obesity and gender on children's perception. *Young Consumers, 13*, 147-160. doi: 10.1108/17473611211233495
- Burmeister, J. M., Kiefner, A. E., Carels, R. A., & Musher-Eizenman, D. R. (2013). Weight bias in graduate school admissions. *Obesity, 21*, 918–920. doi:10.1002/oby.20171

- Byrne, D., London, O., & Reeves, K. (1968). The effects of physical attractiveness, sex, and attitude similarity on interpersonal attraction. *Journal of Personality, 36*, 259-271.  
doi:10.1111/1467-6494.ep8935352
- Cabral, R. R., & Smith, T. B. (2011). Racial/ethnic matching of clients and therapists in mental health services: A meta-analytic review of preferences, perceptions, and outcomes. *Journal of Counseling Psychology, 58*, 537–554. doi:10.1037/a0025266
- Carpenter, K. M., Hasin, D. S., Allison, D. B., & Faith, M. S. (2000). Relationships between obesity and DSM-IV major depressive disorder, suicide ideation, and suicide attempts: Results from a general population study. *American Journal of Public Health, 90*, 251–257.
- Carter, J. A. (1978). Impressions of counselors as a function of counselor physical attractiveness. *Journal of Counseling Psychology, 25*, 28–34. doi:10.1037/0022-0167.25.1.28
- Cash, T. F., Begley, P. J., McCown, D. A., & Weise, B. C. (1975). When counselors are heard but not seen: Initial impact of physical attractiveness. *Journal of Counseling Psychology, 22*, 273–279. doi:10.1037/h0076730
- Cash, T. F., & Kehr, J. (1978). Influence of nonprofessional counselors' physical attractiveness and sex on perceptions of counselor behavior. *Journal of Counseling Psychology, 25*, 336-342.
- Centers for Disease Control and Prevention. (2012). *Overweight and obesity*. Retrieved from <http://www.cdc.gov/obesity/adult/defining.html>
- Chang, D. F., & Berk, A. (2009). Making cross-racial therapy work: A phenomenological study of clients' experiences of cross-racial therapy. *Journal of Counseling Psychology, 56*, 521–536. doi:10.1037/a0016905

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cohen, L., Perales, D. P., & Steadman, C. (2005). The O word: Why the focus on obesity is harmful to community health. *Californian Journal of Health Promotion, 3*, 154–161.
- Constantine, M. G. (2007). Racial microaggressions against African American clients in cross-racial counseling relationships. *Journal of Counseling Psychology, 54*, 1-16. doi: 10.1037/0022-0167.54.1.1
- Cooley, E. J., & Lajoy, R. (1980). Therapeutic relationship and improvement as perceived by clients and therapists. *Journal of Clinical Psychology, 36*, 562–570.
- Corrigan, J. D., & Schmidt, L. D. (1983). Development and validation of revisions in the Counselor Rating Form. *Journal of Counseling Psychology, 30*, 64-75.
- Darley, J. M., & Gross, P. H. (1983). A hypothesis-confirming bias in labeling effects. *Journal of Personality and Social Psychology, 44*, 20-33. doi:10.1037/0022-3514.44.1.20
- Davis, E. M., Rovi, S., & Johnson, M. S. (2005). Mental health, family function and obesity in African-American women. *Journal of the National Medical Association, 97*, 478-482.
- Dean, M. B., Adams II, T. M., & Comeau, M. J. (2005). The effect of a female physical educator's physical appearance on physical fitness knowledge and attitudes of junior high students. *The Physical Educator, 62*, 14-25.
- DiClemente, C. C., Carroll, K. M., Connors, G. J., & Kadden, R. M. (1994). Process assessment in treatment matching research. *Journal of Studies on Alcohol and Drugs, 55*, 156-162.
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology, 24*, 285–290. doi:10.1037/h0033731

- Dishman, R. K., & Buckworth, J. (1996). Increasing physical activity: A quantitative synthesis. *Medicine and Science in Sports and Exercise*, 28, 706-719.
- Drummond, K. (2013). In controversial vote, American Medical Association declares obesity ‘a disease.’ *The Verge*. Retrieved from <http://www.theverge.com/2013/6/19/4444782/american-medical-association-obesity-a-disease>
- Eagly, A. H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but...: A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin*, 110, 109–128. doi:10.1037/0033-2909.110.1.109
- Eaton, D. K., Lowry, R., Brener, N. D., Galuska, D. A., & Crosby, A. E. (2005). Associations of body mass index and perceived weight with suicide ideation and suicide attempts among US high school students. *Archives of Pediatric Adolescent Medicine*, 159, 513-519.
- Ekkekakis, P., Parfitt, G., & Petruzzello, S. J. (2011). The pleasure and displeasure people feel when they exercise at different intensities: Decennial update and progress towards a tripartite rationale for exercise intensity prescription. *Sports Med*, 41, 641 – 671.
- Epperson, D. L., & Pecnik, J. A. (1985). Counselor Rating Form – Short Version: Further validation and comparison to the long form. *Journal of Counseling Psychology*, 32, 143-143.
- Etcoff, N. L., Stock, S., Haley, L. E., Vickery, S. A., & House, D. M. (2011). Cosmetics as a feature of the extended human phenotype: Modulation of the perception of biologically important facial signals. *PLoS ONE*, 6, 1-9. doi:10.1371/journal.pone.0025656

- Evans, R. R., Cotter, E. M., & Roy, J. L. P. (2005). Preferred body type of fitness instructors among university students in exercise classes. *Perceptual and Motor Skills, 101*, 257-266. doi: 10.2466/pms.101.1.257-266
- Evans-Jones, C., Peters, E., & Barker, C. (2009). The therapeutic relationship in CBT for psychosis: Client, therapist and therapy factors. *Behavioural and Cognitive Psychotherapy, 37*, 527–540. doi:10.1017/S1352465809990269
- Farney, L., Aday, R. H., & Breault, K. D. (2006). Age preferences: How old is “too old” for selected service providers among young, middle-aged, and older adults? *Educational Gerontology, 32*, 215 – 225. doi: 10.1080/03601270500476870
- Finkelstein, E. A., Trogon, J. G., Cohen, J. W., & Dietz, W. (2009). Annual medical spending attributable to obesity: Payer-and service-specific estimates. *Health affairs, 28*, w822–w831.
- Flegal, K. M., Carroll, M. D., Kuczmarski, R. J., & Johnson, C. L. (1998) Overweight and obesity in the United States: Prevalence and trends, 1960-1994. *International Journal of Obesity and Related Metabolic Disorders: Journal of the International Association for the Study of Obesity, 22*, 39-47.
- Fuertes, J. N., & Brobst, K. (2002). Clients’ ratings of counselor multicultural competency. *Cultural Diversity and Ethnic Minority Psychology, 8*, 214–223. doi:10.1037/1099-9809.8.3.214
- Garfield, S. L. (1994). Research on client variables in psychotherapy. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (4th ed., pp. 190–228). Oxford, England: John Wiley & Sons.

- Gaziano J. (2010). Fifth phase of the epidemiologic transition: The age of obesity and inactivity. *Journal of the American Medical Association, 303*, 275–276.  
doi:10.1001/jama.2009.2025
- Gearing, R. E., Townsend, L., Elkins, J., El-Bassel, N., & Osterberg, L. (2014). Strategies to predict, measure, and improve psychosocial treatment adherence. *Harvard Review of Psychiatry, 22*, 31 – 45. doi: 10.1097/HRP.10.1097/HRP.0000000000000005
- Gilbert, D. T., & Hixon, J. G. (1991). The trouble of thinking: Activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology, 60*, 509-517.
- Gortmarker, S. L. Must, A., Perrin, J. M., Sobol, A. M., & Dietz, W. H. (1993). Social and economic consequences of overweight in adolescence and young adulthood. *The New England Journal of Medicine, 329*, 1008-1012.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*, 4–27. doi:10.1037/0033-295X.102.1.4
- Guinee, J. P., & Tracey, T. J. G. (1997). Effects of religiosity and problem type on counselor description ratings. *Journal of Counseling and Development, 76*, 65-73.
- Harari, M. & Waehler, C. (1999). The effect of first session attention to termination on counselor social influence rating. *Journal of College Student Psychotherapy, 13*, 67-79. doi: 10.1300/J035v13n04\_06
- Harris, S. M., & Busby, D. M. (1998). Therapist physical attractiveness: An unexplored influence on client disclosure. *Journal of Marital and Family Therapy, 24*, 251–257.  
doi:10.1111/j.1752-0606.1998.tb01081.x

- Harris, M. B., Harris, R. J., & Bochner, S. (1982). Fat, four-eyed, and female: Stereotypes of obesity, glasses, and gender. *Journal of Applied Social Psychology, 12*, 503–516.  
doi:10.1111/j.1559-1816.1982.tb00882.x
- Harsha, D. M., Saywell, R. M., Thygeson, S., & Panozzo, J. (1996). Physician factors affecting patient willingness to comply with exercise recommendations. *Clinical Journal of Sport Medicine, 6*, 112-118.
- Hash, R. B., Munna, R. K., Vogel, R. L., & Bason, J. J. (2003). Does physician weight affect perception of health advice? *Preventive Medicine, 36*, 41-44. doi:  
10.1006/pmed.2002.1124
- Hassel, T. D. (2002). *Effects of obesity on the clinical judgments by Christian and non-Christian mental health professionals*. (Doctoral dissertation). Retrieved from  
<http://spot.lib.auburn.edu/login?url=http://search.proquest.com/docview/305530767?account=8421>
- Hebl, M. R., & Dovidio, J. F. (2005). Promoting the “social” in the examination of social stigmas. *Personality and Social Psychology Review, 9*, 156 – 182.
- Heppner, P., Wampold, B., & Kivlighan Jr., D. (2007). *Research design in counseling* (3rd ed.). Belmont, CA: Thomson Brooks/Cole.
- Hollander-Goldfein, B., Fosshage, J. L., & Bahr, J. M. (1989). Determinants of patients’ choice of therapist. *Psychotherapy: Theory, Research, Practice, Training, 26*, 448–461.  
doi:10.1037/h0085463
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*, 139-149.

- Hosoda, M., Stone-Romero, E. F., & Coats, G. (2003). The effects of physical attractiveness on job-related outcomes: A meta-analysis of experimental studies. *Personnel Psychology*, *56*, 431 – 462.
- Jackson, L. A. (1992). *Physical appearance and gender: Sociobiological and sociocultural perspectives*. Albany, NY: State University of New York Press.
- Jussim, L. (1986). Self-fulfilling prophecies: A theoretical and integrative review. *Psychological Review*, *93*, 429–445. doi:10.1037/0033-295X.93.4.429
- Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, *58*, 697–720. doi:10.1037/0003-066X.58.9.697
- Kasarabada, N. D., Hser, Y. I., Boles, S. M., & Huang, Y. C. (2002). Do patients' perceptions of their counselors influence outcomes of drug treatment? *Journal of Substance Abuse Treatment*, *23*, 327–334.
- Kingkade, T. (2013). Geoffrey Miller censured by University of New Mexico for lying about fat-shaming tweet. *The Huffington Post*. Retrieved from [http://www.huffingtonpost.com/2013/08/07/geoffrey-miller-censured-unm\\_n\\_3716605.html](http://www.huffingtonpost.com/2013/08/07/geoffrey-miller-censured-unm_n_3716605.html)
- Klaczynski, P. A., Goold, K. W., & Mudry, J. J. (2004). Culture, obesity stereotypes, self-esteem, and the “thin ideal”: A social identity perspective. *Journal of Youth and Adolescence*, *33*, 307-317.
- Kluck, A. S. (2010). Family influence on disordered eating: The role of body image dissatisfaction. *Body Image*, *7*, 8-14.
- Kokotovic, A. M., & Tracey, T. J. (1987). Premature termination at a university counseling center. *Journal of Counseling Psychology*, *34*, 80-82.

- Krieglmeyer, R., & Sherman, J. W. (2012). Disentangling stereotype activation and stereotype application in the stereotype misperception task. *Journal of Personality and Social Psychology, 103*, 205–224. doi:10.1037/a0028764
- Langlois, J. H., Kalakanis, L., Rubenstein, A. J., Larson, A., Hallam, M., & Smoot, M. (2000). Maxims or myths of beauty? A meta-analytic and theoretical review. *Psychological Bulletin, 126*, 390–423. doi:10.1037//0033-2909.126.3.390
- Lightstone, K., Francis, R., & Kocum, L. (2011). University faculty style of dress and students' perception of instructor credibility. *International Journal of Business and Social Science, 2*, 15–22.
- Lubker, J. R., Watson II, J. C., Visek, A. J., & Geer, J. R. (2005). Physical appearance and the perceived effectiveness of performance enhancement consultants. *The Sport Psychologist, 19*, 446-458.
- Luborsky, L., Auerbach, A. H., Chandler, M., Cohen, J., & Bachrach, H. M. (1971). Factors influencing the outcome of psychotherapy: A review of quantitative research. *Psychological Bulletin, 75*, 145–185. doi:10.1037/h0030480
- Macrae, C. N., & Bodenhausen, G. V. (2000). Social cognition: Thinking categorically about others. *Annual Review of Psychology, 51*, 93-120.
- Maramba, G. G., & Nagayama Hall, G. C. (2002). Meta-analyses of ethnic match as a predictor of dropout, utilization, and level of functioning. *Cultural Diversity and Ethnic Minority Psychology, 8*, 290–297. doi:10.1037/1099-9809.8.3.290
- McKee, K., & Smouse, A. D. (1983). Clients' perceptions of counselor expertness, attractiveness, and trustworthiness: Initial impact of counselor status and weight. *Journal of Counseling Psychology, 30*, 332-338.

- Meier, S. T., & Davis, S. R. (2010). *The elements of counseling* (7<sup>th</sup> ed.). Belmont, CA: Brooks/Cole.
- Melville, D. S., & Maddalozzo, J. G. F. (1988). The effects of a physical educator's appearance of body fatness on communicating exercise concepts to high school students. *Journal of Teaching in Physical Education, 7*, 343-352.
- Miller, B. J., & Lundgren, J. D. (2010). An experimental study of the role of weight bias in candidate evaluation. *Obesity, 18*, 712–718. doi:10.1038/oby.2009.492
- Miller, D. T., & Turnbull, W. (1986). Expectancies and interpersonal processes. *Annual Review of Psychology, 37*, 233–256.
- Montoya, R. M., & Horton, R. S. (2012). A meta-analytic investigation of the processes underlying the similarity-attraction effect. *Journal of Social and Personal Relationships, 30*, 64–94. doi:10.1177/0265407512452989
- Najavits, L. M., & Weiss, R. D. (1994). Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. *Addiction, 89*, 679–688.
- Naumann, L. P., Vazire, S., Rentfrow, P. J., & Gosling, S. D. (2009). Personality judgments based on physical appearance. *Personality and Social Psychology Bulletin, 35*, 1661–1671. doi:10.1177/0146167209346309
- Norcross, J. C. (2011). *Psychotherapy relationships that work: Evidence-based responsiveness*. New York, NY: Oxford University Press.
- Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2012). *Prevalence of obesity in the United States, 2009-2010*. (NCHS Data Brief No. 82). Retrieved from <http://wood-ridge.schoolwires.net/cms/lib6/NJ01001835/Centricity/Domain/175/Obesity%20Article.pdf>

- Orlinsky, D. E., Grawe, K., & Parks, B. K. (1994). Process and outcome in psychotherapy: Noch einmal. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (4th ed.; pp. 270–376). Oxford, England: John Wiley & Sons.
- Paradise, L. V., Cohl, B., & Zweig, J. (1980). Effects of profane language and physical attractiveness on perceptions of counselor behavior. *Journal of Counseling Psychology, 27*, 620-624.
- Pascal, B., & Kurpius, S. E. R. (2012). Perceptions of clients: Influences of client weight and job status. *Professional Psychology: Research and Practice, 43*, 349–355.  
doi:10.1037/a0028525
- Patton, J. H., Stanford, M. S., & Barratt, E. S. (1995). Factor structure of the Barratt Impulsiveness Scale. *Journal of Clinical Psychology, 51*, 768-774.
- Pingitore, R., Dugoni, B. L., Tindale, R. S., & Spring, B. (1994). Bias against overweight job applicants in a simulated employment interview. *Journal of Applied Psychology, 79*, 909–916.
- Ponterotto, J. G., & Furlong, M. J. (1985). Evaluating counselor effectiveness: A critical review of rating scale instruments. *Journal of Counseling Psychology, 32*, 597-616.
- Puhl, R., & Brownell, K. D. (2001). Bias, discrimination, and obesity. *Obesity Research, 9*, 788–805. doi:10.1038/oby.2001.108
- Puhl, R. M., & Heuer, C. A. (2009). The stigma of obesity: A review and update. *Obesity, 17*, 941–964. doi:10.1038/oby.2008.636
- Ribner, D. S., & Knei-Paz, C. (2002). Client's view of a successful helping relationship. *Social Work, 47*, 379 – 387. doi: 10.1093/sw/47.4.379

- Ross, M. E., & Shannon, D. M. (2008). *Applied quantitative methods in education*. Dubuque, IA: Kendall/Hunt Publishing Company.
- Ross, J., Zaldivar, A., Irani, L., & Tomlinson, B. (2010). Who are the Crowdworkers?: Shifting Demographics in Amazon Mechanical Turk. *Proceedings of the Association for Computing Machinery CHI 2010 Conference on Human Factors in Computing Systems, USA*, 2863-2872.
- Saguy, A. C., & Gruys, K. (2010). Morality and health: News media constructions of overweight and eating disorders. *Social Problems*, 57, 231–250. doi:10.1525/sp.2010.57.2.231
- Salameh, E., Olsen, S., & Howard, D. (2012). Nonattendance with clinic follow-up appointments: Diabetes as exemplar. *The Journal for Nurse Practitioners*, 8, 797-803.
- 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, 1275-1281. doi:10.1038/ijo.2012.211
- 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 anti-fat bias. *Obesity*, 14, 440–447. doi:10.1038/oby.2006.58
- Sebastian, R. J., & Bristow, D. (2008). Formal or informal? The impact of style of dress and forms of address on business students' perceptions of professors. *Journal of Education for Business*, 83, 196–201.
- Shapiro, A. K., Struening, E., Shapiro, E., & Barten, H. (1976). Prognostic correlates of psychotherapy in psychiatric outpatients. *The American Journal of Psychiatry*, 133, 802–808.

- Sharpless, B. A., & Barber, J. P. (2009). A conceptual and empirical review of the meaning, measurement, development, and teaching of intervention competence in clinical psychology. *Clinical Psychology Review, 29*, 45 – 56.
- Sinclair, L., & Kunda, Z. (1999). Reaction to a black professional: Motivated inhibition and activation of conflicting stereotypes. *Journal of Personality and Social Psychology, 77*, 885–904.
- Snyder, M. (1992). Motivational foundations of behavioral confirmation. In M. P. Zanna (Ed.), *Advances in -experimental social psychology, Volume 25* (pp.67-114). San Diego, CA: Academic Press, Inc.
- Snyder, M., Tanke, E. D., & Berscheid, E. (1977). Social perception and interpersonal behavior: On the self-fulfilling nature of social stereotypes. *Journal of Personality and Social Psychology, 35*, 656-666.
- Stake, J., & Lauer, M. L. (1987). The consequences of being overweight: A controlled study of gender differences. *Sex Roles, 17*, 31-47.
- Stanford, M. S., Mathais, C. W., Dougherty, D. M., Lake, S. L., Anderson, N. E., & Patton, J. H. (2009). Fifty years of the Barratt Impulsiveness Scale: An update and review. *Personality and Individual Differences, 47*, 385-395.
- Stanovich, K. E., & West, R. F. (2000). Individual differences in reasoning: Implications for the rationality debate? *Behavioral and Brain Sciences, 23*, 645–665.
- Steinberg, L., Sharp, C., Stanford, M. S., & Tharp, A. T. (2013). New tricks for an old measure: The development of the Barratt Impulsiveness Scale-Brief (BIS-Brief). *Psychological Assessment, 25*, 216-226. doi: 10.1037/a0030550

- Sue, D. W., & Sue, D. (2012). *Counseling the culturally diverse: Theory and practice* (6th ed.). Hoboken, NJ: John Wiley & Sons, Inc.
- Sypeck, M. F., Gray, J. J., & Ahrens, A. H. (2004). No longer just a pretty face: Fashion magazines' depictions of ideal female beauty from 1959 to 1999. *International Journal of Eating Disorders, 36*, 342–347. doi:10.1002/eat.20039
- Tall, K. M., & Ross, M. J. (1991). The effects of therapist-client age similarity on pretherapy expectations. *Journal of Contemporary Psychotherapy, 21*, 197–209.  
doi:10.1007/BF00973118
- Thompson, B., & Hill, C. (1993). Client perceptions of therapist competence. *Psychotherapy Research, 3*, 124–130. doi:10.1080/10503309312331333729
- Thompson, V. L. S., Bazile, A., & Akbar, M. (2004). African Americans' perceptions of psychotherapy and psychotherapists. *Professional Psychology: Research and Practice, 35*, 19–26. doi:10.1037/0735-7028.35.1.19
- Todorov, A., Mandisodza, A. N., Goren, A., & Hall, C. C. (2005). Inferences of competence from faces predict election outcomes. *Science, 308*, 1623–1626. doi:10.2307/3841621
- Tracey, T. J., Glidden, C. E., & Kokotovic, A. M. (1988). Factor structure of the Counselor Rating Form-Short. *Journal of Counseling Psychology, 35*, 330-335.
- Turkcan, A., Nuti, L., DeLaurentis, P., Tian, Z., Daggy, J., Zhang, L., Lawley, M., & Sands, L. (2013). No-show modeling for adult ambulatory clinics. In B. Denton (Ed.), *Handbook of Healthcare Operations Management* (pp. 251-288). New York, NY: Springer.
- Vocks, S., Legenbauer, T., & Peters, I. (2007). Does shape matter? Preferences for a female therapist's figure among patients with eating disorders. *Psychotherapy Research, 17*, 416–422. doi:10.1080/10503300600740703

- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Weissman, M. M., Verdeli, H., Gameroff, M. J., Bledsoe, S. E., Betts, K., Mufson, L., Fitterling, H., & Wickramaratne, P. (2006). National survey of psychotherapy training in psychiatry, psychology, and social work. *Archives of General Psychiatry*, *63*, 925 – 934.
- Wiggins, J. D. (1980). Effectiveness ratings of counselors by coached clients related to attractiveness-fitness variables. *American Mental Health Counselors Association Journal*, *2*, 83–87.
- Willis, J., & Todorov, A. (2006). First impressions: Making up your mind after a 100-ms exposure to a face. *Psychological Science*, *17*, 592–598. doi:10.1111/j.1467-9280.2006.01750.x
- Wilson, F. R., & Yager, G. G. (1990). Concurrent and construct validity of three counselor social influence instruments. *Measurement & Evaluation in Counseling & Development*, *23*, 52-67.
- Young, J. W. (1979). Symptom disclosure to male and female physicians: Effects of sex, physical attractiveness, and symptom type. *Journal of Behavioral Medicine*, *2*, 159–169. doi:10.1007/BF00846664

## Appendix A

### Demographic Questionnaire

1. Age: \_\_\_\_\_
2. Please type the year in which you were born: \_\_\_\_\_
3. Please select the name of the country in which you currently reside:
  - United States
  - Other
4. Gender:
  - Male
  - Female
  - Other: \_\_\_\_\_
5. Race and ethnicity (may check more than one):
  - American Indian or Alaska Native
  - Asian
  - Black or African American
  - Hispanic or Latino/a
  - Native Hawaiian and Other Pacific Islander
  - White
  - Biracial or Multiracial: \_\_\_\_\_
  - Other: \_\_\_\_\_
6. Marital Status:
  - Single
  - Partnered/Long-term relationship
  - Married
  - Separated
  - Divorced
  - Widowed
  - Other: \_\_\_\_\_

7. Highest Level of Education Completed (check one):
- Graduate degree
  - Some graduate school
  - Degree from a 4-year university
  - Degree from a 2-year college
  - Vocational School
  - Some college
  - High school diploma
  - General Education Diploma (GED)
  - Middle (“junior high”) or primary school
  - Other: \_\_\_\_\_
8. Please identify your current career field:
- Counselor
  - Psychologist
  - Therapist
  - Social Worker
  - Counselor/Psychologist/Therapist/Social Worker Trainee
  - Other
9. Please type your current height (in inches): \_\_\_\_\_
10. Please type your current weight (in pounds): \_\_\_\_\_
11. Please mark all of the following that you have been diagnosed with:
- Anorexia Nervosa
  - Bulimia Nervosa
  - Binge-Eating Disorder
  - Other Eating Disorder
  - None
12. How many session of psychotherapy or counseling have you previously engaged in:
- Zero
  - One to four
  - five to ten
  - More than ten
13. Are you currently engaged in psychotherapy or counseling:
- Yes
  - No

Appendix B

Counselor Models

Smallest Female Model



Smallest Male Model



Second Smallest Female Model



Second Smallest Male Model



Second Largest Female Model



Second Largest Male Model



Largest Female Model



Largest Male Model



## Appendix C

### Written Description to Accompany Models of Counselors

I am Dr. Thomas. I am a licensed psychologist and I specialize in psychotherapy for individuals and couples. I have a Ph.D. in Counseling Psychology and have been providing psychotherapy services for approximately ten years. I use a variety of approaches to help clients better understand themselves and increase their satisfaction in life.

## Appendix D

### Sample Screen Shot of Ad with Model from Survey

Though all of the following characteristics are desirable, counselors differ in their strengths. We are interested in knowing how you view these differences. Remember, your responses are totally anonymous. There is no way to associate you with the ratings you make.

---



I am Dr. Thomas. I am a licensed psychologist and I specialize in psychotherapy for individuals and couples. I have a Ph.D. in Counseling Psychology and have been providing psychotherapy services for approximately ten years. I use a variety of approaches to help clients better understand themselves and increase their satisfaction in life.

**Based on this ad, please rate Dr. Thomas on the following characteristics:**

## Appendix E

### Description of Task to be Posted on MTurk.com

If you reside in the United States, are at least 19 years old, identify as a woman, and are **not** employed as or in training to be a counselor (e.g., job titles including counselor, psychologist, social worker, or therapist) then you are eligible to participate in a brief research study about how counselors are perceived in their advertisements. The survey should take no more than 10 minutes and you will be compensated \$0.25 for your participation in this study. Please click the link below for more information and to access the study (You may take the survey only one time). At the end of the survey, you will receive a unique code to paste into the box below to receive credit for taking our survey.

Survey link: [https://auburn.qualtrics.com/SE/?SID=SV\\_9ouYFjXcfm25xz](https://auburn.qualtrics.com/SE/?SID=SV_9ouYFjXcfm25xz)

Appendix F  
Information Letter



**AUBURN**  
UNIVERSITY

DEPARTMENT OF  
SPECIAL EDUCATION,  
REHABILITATION, AND COUNSELING

**(NOTE: DO NOT SIGN THIS DOCUMENT UNLESS AN IRB APPROVAL STAMP  
WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)**

Information Letter

*Auburn University  
Department of Special Education, Rehabilitation, and Counseling Psychology  
2084 Haley Center  
Auburn, AL 36849*

**You are invited to participate in a research study** to investigate how counselors are perceived in their advertisements. The study is being conducted by Ashley N. Malchow, B.A., under the direction of Dr. Annette Kluck, in the Auburn University Department of Special Education, Rehabilitation, and Counseling Psychology. You are a possible participant because you reside in the United States, are at least 19 years old, identify as a woman, and are **not** employed as or in training to be a counselor (e.g., job titles including counselor, psychologist, social worker, or therapist).

**What will be involved if you participate?** If you choose to participate, you will be asked to respond to an online questionnaire that includes demographic information and questions regarding how you act and think in different situations. You will also be asked to look at an ad for a counselor and respond to questions about the counselor. This should take about 7 minutes, possibly up to 10.

**Are there any risks or discomforts?** The risk to participants in this study is expected to be minimal. Although unlikely, it is possible that you may experience some psychological

discomfort while reflecting on yourself and describing how you act and think in different situations. You may discontinue participation at any time by closing your browser. If you should experience any psychological discomfort, please contact a mental health provider in your area or the national crisis hotline at 1-800-273-8255. To find a provider in your area you may use the following link: [http://therapists.psychologytoday.com/rms/prof\\_search.php](http://therapists.psychologytoday.com/rms/prof_search.php). You are responsible for all fees incurred for treatment related to your participation in this study.

**Will you receive compensation for participating?** Each participant who completes the study will be compensated \$0.25. If you choose to participate, you will be provided with a code at the end of the survey that you can enter into the MTurk.com website to demonstrate completion of the task and receive payment. All compensation will be made anonymously through the MTurk website and the investigator will not be able to identify you at any time.

**Are there any costs?** There are no monetary costs to participants in this study.

**If you change your mind about participating,** you can withdraw by closing your browser. However, after you submit the anonymous survey it cannot be withdrawn. Your participation is completely voluntary.

**Your privacy will be protected.** Information obtained from this study will remain anonymous. Information obtained through your participation may be published in a professional journal and/or presented at a professional conference, but such information will not and cannot be directly connected with you or any other participants.

**If you have questions about this study,** please contact Ashley N. Malchow at [anm0017@tigermail.auburn.edu](mailto:anm0017@tigermail.auburn.edu) or Dr. Annette Kluck at [ask0002@auburn.edu](mailto:ask0002@auburn.edu).

**If you have questions about your rights as a research participant,** you may contact the Auburn University Office of Human Subjects Research Compliance of the Institutional Review Board by phone (334) 844-5966 or e-mail at [hsubjec@auburn.edu](mailto:hsubjec@auburn.edu) or [IRBChair@auburn.edu](mailto:IRBChair@auburn.edu).

SELECT "I WISH TO PARTICIPATE" AND CLICK THE FORWARD BUTTON (>>)  
BELOW IF...

- YOU WANT TO PARTICIPATE AND
- RESIDE IN THE UNITED STATES AND
- IDENTIFY AS FEMALE AND
- ARE 19 YEARS OF AGE OR OLDER AND
- ARE NOT EMPLOYED AS OR IN TRAINING TO BE A COUNSELOR.

IF YOU DO NOT WISH TO PARTICIPATE, JUST CLOSE YOUR BROWSER WINDOW.  
YOU MAY PRINT THIS LETTER TO KEEP IF YOU WISH.

The Auburn University Institutional Review Board has approved this document for use from  
May 18, 2014 to May 17, 2015. Protocol #14-206 EP 1405

## Appendix G

### Debriefing Letter



**AUBURN**

UNIVERSITY

DEPARTMENT OF  
SPECIAL EDUCATION,  
REHABILITATION, AND COUNSELING

### Debriefing

For the Study entitled:

“Client Perception of Counselor Body Size: Effect on Evaluations”

Dear Participant:

During this study, you were asked to respond to an online questionnaire that included demographic information and questions regarding how you act and think in different situations. You were also asked to look at pictures of counselors and respond to questions about the pictured counselors. You were told that the purpose of this study was to investigate how counselors are perceived in their advertisements. The actual purpose of this study was to examine potential differences in how competent a counselor is rated to be depending on the counselor’s perceived body size and how traits in respondents may affect the way people judge counselor’s competence based on body size. In this case, we asked you to provide information about impulsiveness. We did not tell you everything about the purpose of the study because having the knowledge may have influenced the way you responded to questions.

You are reminded that of the consent document at the start of the survey in which you were informed that you could discontinue at any time and that this is an anonymous study for which no identifying data is being collected meaning that it will not be possible to track or identify individual participants. Please contact the primary investigator at [anm007@tigermail.auburn.edu](mailto:anm007@tigermail.auburn.edu) if we can answer questions you have about this study.

If you felt discomfort during your participation or after reading more about the purpose of the study, you are encouraged to contact a mental health provider in your area or the national crisis hotline at 1-800-273-8255. To find a provider in your area you may use the following link: [http://therapists.psychologytoday.com/rms/prof\\_search.php](http://therapists.psychologytoday.com/rms/prof_search.php). You are responsible for all fees incurred related to treatment following your participation in this study.

If you have questions about your participation in the study, please contact Ashley N. Malchow at [anm0017@tigermail.auburn.edu](mailto:anm0017@tigermail.auburn.edu), or her faculty advisor, Dr. Annette Kluck, at [ask0002@auburn.edu](mailto:ask0002@auburn.edu).

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research Compliance of the Institutional Review Board by phone (334) 844-5966 or e-mail at [hsubjec@auburn.edu](mailto:hsubjec@auburn.edu) or [IRBChair@auburn.edu](mailto:IRBChair@auburn.edu).

Please again accept our appreciation for your participation in this study. Please click the next button below to receive a code that you may enter in the MTurk.com website to receive payment for your time. All compensation will be made anonymously through the MTurk website and the investigator will not be able to identify you at any time.

*Ashley Malchow*  
*Doctoral Candidate*

*Dr. Annette Kluck*  
*Faculty Advisor*

*05/18/2014*

*Auburn University*  
*Department of Special Education, Rehabilitation, & Counseling Psychology*

