# A MODEL OF MENTAL HEALTH STIGMA AND VIEWS OF MASCULINITY AS CONTRIBUTING FACTORS TO BODY DISSATISFACTION AS MEASURED BY THE BDD-SS

By

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Abstract: There seems to be a gap in the current literature when identifying factors which exacerbate Body Dysmorphic Disorder (BDD) within males. Most literature which focused on body image disturbance examined the impact of the lived experiences of women. Males and their experience with masculinities, had little emphases from researchers. The purpose of this study was to further the understanding of the impact of gender roles and the stigma associated with seeking mental health which was examined as predictive factors to BDD symptomology, and examine the impact masculinity and mental health stigma had on the manifestation of BDD symptomology for those who identify as masculine. Both mediation and moderation analyses were used to examine the relationships between masculinity, mental health stigma, gender, and body dissatisfaction. The total sample size for this study was determined to be *n*=396 (148 male, 243 female, 3 non-conforming, and 2 identifying as transgender (f-m)). The results of this study indicated that there were no mediating or moderating effects for any of the four research questions, however there were telling results which added to the literature related to men, mental health stigma, and BDD, as well as identifying developmental factors addressed at an early age so that preventative measures associated with toxic masculinity could be addressed.

*Keywords:* masculinity, gender, BDD, body dissatisfaction, males, mental health stigma, body image

## Table of Contents

Chapter	Page
I. INTRODUCTION	1
Body Dysmorphic Disorder  Muscle Dysmorphia  Masculinity  BDD and Mental Illness  Mental Health Stigma	4 4 6
Purpose and Objectives	8
Research Questions and Hypotheses	9
II. REVIEW OF THE LITERATURE	13
III. METHODOLOGY	13
Participants Procedure/Data Collection Measurements Data Analysis	18
IV. FINDINGS	27
V. CONCLUSION	38
Discussion Implication Limitations	41
APPENDICIES	47
Appendix A – IRB Approval Form  Appendix B – Informed Consent  Appendix C – Demographics Questionnaire  Appendix D – Male Role Norms Inventory-SF  Appendix E– BDD Symptom Scale (BDD-SS)  Appendix F – ATSPPH-SF Scale  Appendix G – Histograms	69 72 75 77
REFERENCES	86

## LIST OF TABLES

Table	Page
One: Highest Level of Education	35
Two: Race	36
Three: Gender Identity	36
Four: Region of the U.S	37
Five: Income	38
Six: Sexual Orientation	38
Seven: H1 Coefficients	50
Eight: H2 Coefficients	53
Nine: Correlation Table	54
Ten: H3 Model Summary	54
Eleven: H3 Coefficients	55
Twelve: Correlation Table	57
Thirteen: H4 Model Summary	58
Fourteen: H4 Coefficients	58

## LIST OF FIGURES

Figure	Page
One: Mediation Conceptual Model	10
Two: Moderation Conceptual Model	11
Three: Mediation Model	12
Four: Moderation Conceptual Model	12
Five: Mediation Statistical Model	50
Six: Statistical Moderation Model: Model Coefficients	51
Seven: ATSPPHTot with BDDSSTot by Gender	52
Eight: Mediation Statistical Model	54
Nine: Moderation Statistical Model	56
Ten: ATSPPHTot with BDDSSTot by MRNITot	57

#### Chapter I

# A MODEL OF MENTAL HEALTH STIGMA AND VIEWS OF MASCULINITY AS CONTRIBUTING FACTORS TO BODY DISSATISFACTION AS MEASURED BY THE BDD-SS

Mental illness is not a rare phenomenon in the United States as seventeen percent of the populous has a diagnosis of a mental health condition (NIMH, 2017). The World Health Organization identified depression as the fourth leading cause of individuals who claim disability concerns in the work force (Murray & Lopez, 1996). Treatment for depression can be quite costly as the price to treat depression is roughly \$2,500 per person annually (Luppa, Heinrich, Angermeyer, Konig, & Riedel-Heller, 2007). The CDC (2018) stated that up to 5% of the U.S. population has had severe depressive symptomologies within the last 2 weeks. A person's risk for the reoccurrence of depressive symptoms doubles after they're first bought of depression (CDC, 2018). Eight percent of children and adolescents, ages 13-19, are at an increased risk for developing Major Depressive Disorder with females being twice as likely (Avenevoli, Swensen, He, Burstein, & Merikangas, 2015).

Mental illness and depression are often indicated in conjunction with suicidal thoughts and attempts (Shaw, Arditte Hall, Rosenfield, & Timpano, 2016). According to the National Institute of Mental Health suicide is the third leading cause of death for individuals ranging from 10-24 years of age (Any Mental Illness (AMI) Among Adults, 2018). Approximately 90% of completed suicides reported involve an individual with a mental health diagnosis or a suspected mental illness (Any Mental Illness (AMI) Among Adults, 2018). Persons with severe body

image concerns run a higher risk of suicidal thoughts when compared to individuals without similar concerns (Phillips, Siniscalchi, & McElroy, 2004). It has been identified that men complete suicide 3.5 times more than women (afsp.org). The highest rates of suicide are for middle age men, with roughly 70% of completed suicides coming from individuals who identify as Caucasian (afp.org).

Individuals who develop severe body image dissatisfaction at a young age have an increased risk for suicide attempts (American Psychiatric Association, 2013). Youth who have developed Body Dysmorphic Disorder (BDD), a specific diagnosis concerning the individual's body image, are twice as likely to attempt suicide when compared to youth without a BDD diagnosis or suspected concern (Bjornsson, Didie, Grant, Menard, Stalker, & Phillips, 2013). Adults and individuals with BDD are 45% more likely to attempt suicide in their lifetime as opposed to peers without a BDD diagnosis (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010).

#### **Body Dysmorphic Disorder**

An individual diagnosed with BDD displays extreme dissatisfaction or a preoccupation with a portion of their body or a specific body part (American Psychiatric Association, 2013). To meet criteria for this diagnosis, an individual must have a clear hyper-focus on a perceived "defect" which others do not notice (Didie, Reinecke, & Philips, 2010; Kaplan, Rossell, Enticott, & Castle, 2013). These preoccupations most often surround a person's hair, nose, epidermis, face shape, face size, teeth, etc. (American Psychiatric Association, 2013). For some men who have BDD, the area of preoccupation focuses on a perceived deficit of penile length or girth (Wylie & Eardley, 2007).

Preoccupations with particular body parts can have adverse effects on an individual's social wellbeing (Didie, Reinecke, & Philips, 2010). One documented adverse effect is the development of agoraphobia, fear of leaving one's home, due to the fear of being judged for perceived physical "flaws" (American Psychiatric Association, 2013). In the Diagnostic and Statistical Manual Fifth Edition (DSM V) (2013), feelings associated with BDD, "...range from looking 'unattractive' or 'not right' to looking 'hideous' or 'like a monster'" (p 243). Feelings associated with a lack of self-esteem have been paired with people who have BDD symptomologies (Phillips, Siniscalchi, & McElroy, 2004) and the development of social introversion due to negative body image (American Psychiatric Association, 2013).

There are typical behaviors associated with BDD which include: checking images in reflective surfaces, grooming, picking of hair and skin, comparing themselves to others, and continual seeking of validation from others (American Psychiatric Association, 2013). Other behaviors associated with BDD contain: camouflage, avoiding reflections, avoidance of photographs, reduction in academics, and hair pulling tendencies (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010; Blau, 2014; OCD Center of Los Angeles, 2014). To camouflage people use hats or others accessories to shift people's eyes from their perceived "flaw" (Grant & Phillips, 2005). One of the most common ways a person may avoid the pressure and anxiety associated with BDD is by "covering up" or covering their body through the use of baggy clothes (Medical Dictionary, 2014). It is suggested that up to 94% of people who have BDD will utilize "covering up" as a coping technique (Medical Dictionary, 2014).

Prevalence rates of BDD are high among college aged (18-24) individuals; with the rate of BDD symptomologies within this population being 12% higher when compared to other age ranges (Bohne, Keuthen, Wilhelm, Deckersbach, & Jenike, 2002). Women have been the

primary focus of BDD research to this point (Dakanalis et al., 2014), but Buhlman (2010) found no statistical difference between men and women with BDD. The DSM-V noted on average BDD prevalence at approximately 2.4% of the U.S. population; with 2.5% of women and 2.2% of men being identified as having BDD (American Psychiatric Association, 2013).

#### Muscle Dysmorphia

Muscle Dysmorphia (MD), a subset of BDD, occurs when the person's preoccupation focuses on a perceived lack of muscularity and lean mass (Pope, Gruber, Choi, Olivardia, & Phillips, 1997; Choi, Pope Jr., & Olivardia, 2002; Dakanalis et al., 2013). There is limited research which focuses on BDD and eating disorders within men (Dakanalis & Riva, 2013), rather most research on BDD and men involves MD (American Psychiatric Association, 2013). This preoccupation with lack of muscularity is accompanied by lower quality of life (Tod & Edwards, 2015). The primary documented focus of preoccupation is the chest and shoulder area (Dakanalis & Riva, 2013), as well as, the muscles of the calves (Smolak, Murnen, & Thompson, 2005).

#### **Masculinity**

BDD and body dissatisfaction appear to be a growing area of research, however there remain few studies looking at males as a collective group (Dakanalis et al., 2014). Studies involving male participants focus on the specific construct of Muscle Dysmorphia (MD) rather than BDD as a larger construct. To identify possible contributing factors to body dissatisfaction in males, we must first examine the lens by which males may see the world. To adjust the lens by which males view their roles in society, the concept of masculinity must be addressed.

Identity development recently became a more salient focus for researchers (Sue & Sue, 2008). Exploration of individual differences and aspects which contribute to an individual's context of life have led researchers in the direction of gender (Englar-Carlson, Stevens, & Scholz, 2010). The term "gender" in research was originally associated with the lived experiences of women and the exploration of femininity; having little to no focus on masculinity or the males' perspective (Christler & McCreary, 2010).

Researchers have struggled to identify a masculine identity model in order to address the individual components of male development and gender roles (Englar-Carlson, Stevens, & Scholz, 2010). In western society there are societal norms and expectations of what a man is supposed to embody and the adherence to these roles has been termed the *masculine hypothesis* (Griffiths, Murray, & Touyz, 2015). Gender role norms are defined as a set of beliefs, attitudes, and behaviors placed on the greater populous, set forth by society, and based on a gender binary system (Connell, 1995). General themes associated with the masculine hypothesis include: dulling of emotions, preference for isolation, a lack of desire to ask for help, protector of others, must provide financially for the family, and to take on leadership roles (Griffiths, Murray, & Touyz, 2015). However, recently there has been a movement in research to shift from the generalizing concept of "masculinity" to a more individual idea of "masculinities". The identified concept of multiple masculinities helps to structure how different individuals view ideas, beliefs, and understand masculine traits within differing cultural contexts (Englar-Carlson, Stevens, & Scholz, 2010).

For men, in westernized society there appears to be a concept which illustrates that men should be in power positions (Englar-Carlson, Stevens, & Scholz, 2010). However, to take this broad swath approach toward all men, or those who identify with traditional masculine

presentations, discounts their cultural influences altogether. Many men from various ethnic minority groups feel disempowered throughout westernized societies (Chin, 2005). A tall muscular body structure is portrayed as most desirable; as this attribute possess higher status on a social level (Blashill, 2011).

#### **BDD** and Mental Illness

Researchers suggest those who have BDD or have characteristics of BDD seek medical attention frequently or elect for plastic surgery (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010; OCD Center of Los Angeles, 2014). Although there have been correlations between BDD and other mental illness, many individuals still fail to understand these possible connections exist (Kaplan, Rossell, Enticott, & Castle, 2013). Hours devoted to preoccupations can only exacerbate the focus on an individuals perceived "flaws" (Theravive, 2014).

BDD is an Obsessive Compulsive categorized diagnosis, which also includes skewed views of one's body (American Psychiatric Association, 2013). Individuals with BDD are more prone to hospitalization, suicidal thoughts, and suicide attempts (Phillips, Siniscalchi, & McElroy, 2004). The rates of suicidal ideation are elevated for both children and adults who have BDD (American Psychiatric Association, 2013). BDD can lead to many altered mental functioning, affecting the person on a plethora of levels (American Psychiatric Association, 2013). Comorbid diagnoses, or having more than one concurrent diagnosis, are not uncommon among those who have BDD (Gunstad & Phillips, 2003; Fang & Hofmann, 2010; OCD Center of Los Angeles, 2014). Bjornsson et. al (2013) found that those who develop BDD symptomologies earlier in life are more likely to develop other diagnosable mental health concerns than those who develop BDD later in life.

There appears to be many differing diagnoses which concurrently manifest with BDD. One of these diagnoses is Obsessive Compulsive Disorder (OCD), as 24% of those who have BDD will also meet the criterion for OCD (OCD Center of Los Angeles, 2014). Fang and Hofmann (2010) found that 68.8% of their sample population showed characteristics of comorbid Social Anxiety Disorder (SAD). Also, it has been identified that there is some correlation between major depressive episodes and BDD (Wylie & Eardley, 2007), while Rosen and Ramirez (1998) suggested that up to 1/3 of those who have BDD will also have a comorbid eating disorder.

There are many symptoms of other related diagnoses which are prevalent in those who have BDD: depressive symptomologies, elevated anxiety, anger, and somatic symptoms (Phillips, Siniscalchi, & McElroy, 2004; American Psychiatric Association, 2013). An increase in depressive symptomologies has been associated with MD (Grieve & Shacklette, 2012). Negative self-esteem is a major factor associated with BDD. Phillips, Siniscalchi, and McElroy (2004) reported individuals with a diagnosis of BDD in a clinical setting were 1.5 standard deviations below the norm when measuring self-esteem using the Rosenberg Self-Esteem Scale.

#### **Mental Health Stigma**

Mental health concerns have been shown to decrease with the assistance of a mental health professional (Wampold, 2001). However, it has been noted that men are less likely to seek mental health services than their female counterparts (Robertson & Williams, 2010; Serious Mental Illness (SMI) Among Adults, 2018). Many mental health professionals have identified a belief of mental illness being gender atypical, as well as women being the only people who may need to see a mental health professional (Englar-Carlson, Stevens, & Scholz, 2010). A major

contribution toward the lack of mental health seeking is the concept of "toxic masculinity" (Brooks & Good, 2001). Englar-Carlson, Stevens, and Scholz (2010) suggested that the concept of men's distain for seeking mental health help stemmed from socially constructed ideas of what it means to be a "man."

Addis (2010) identified the social implications associated with gender roles caused undo stress on individuals and furthermore that the stress was associated with a lack of emotional regulation. Expectations associated with the male gender role are presumed to be major contributing factors towards men's desire to circumvent any emotionality not deemed to be manly (Addis, 2010). Many of the "appropriate" emotions and characteristics for men are associated with the appearance of being tough and refusal of help from others, which includes a focus on mental health concerns (Davies, McCrae, Frank, Dochnahl, Pickering, Harrison, & Wilson, 2000).

In conjunction with the stigma associated with mental health from men, those who have BDD have been identified as a population who will not seek help from a mental health professional (Veale & Bewley, 2015). Although Cognitive Behavioral Therapy has been shown to be successful for those who have BDD (Grant & Phillips, 2005; Veale, 2010; Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010; OCD Center of Los Angeles, 2014; Veale & Bewley, 2015) many with BDD will only initially seek help if there is a comorbid mental health concern (Veale & Bewley, 2015).

#### **Purpose and Objectives**

Through the review of the literature, there has yet to be an explicit examination of the impact of masculinity and mental health stigma on BDD symptomology. Kilmartin (2005)

inspected the gendered association between the development of mental illness and the impact masculinity had on the development of mental health stigma. Through the examination of feelings associated with the perception of masculinity, gender roles, and mental health stigma, clinicians had a better understanding of the factors which contributed to a person's development of BDD and henceforth an additional barrier to seeking mental health help for those who identified as male. Due to the gap in the literature, it was determined that both mediating and moderating analyses should be conducted as the literature was too sparse to guide a single research question regarding the relationship between masculinity, mental health stigma, and body dysmorphic symptomatology.

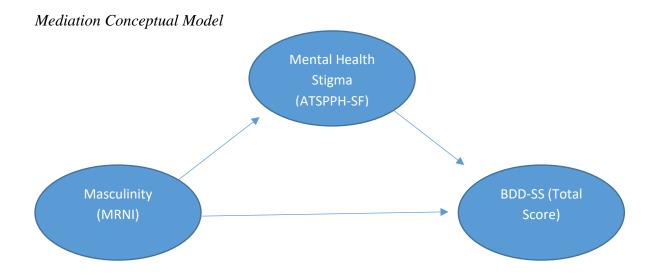
#### **Research Question / Hypothesis**

**R1:** To what extent does a male's mental health stigma mediate the relationship between masculinity and BDD-SS total scores?

**H0:** Mental health stigma of males does not mediate the relationship between masculinity and BDD-SS total scores.

**H1:** Mental health stigma of males does mediate the relationship between masculinity and BDD-SS total scores.

Figure 1

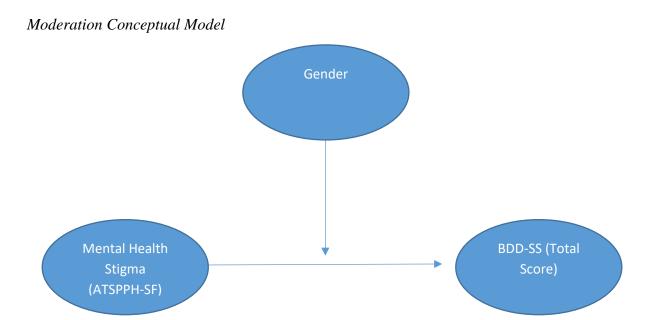


**R2:** To what extent does a person's gender moderate the relationship between mental health stigma and BDD-SS total scores?

**H0:** Gender does not moderate the relationship between mental health stigma and BDD-SS total scores.

**H2:** Gender does moderate the relationship between mental health stigma and BDD-SS total scores.

Figure 2

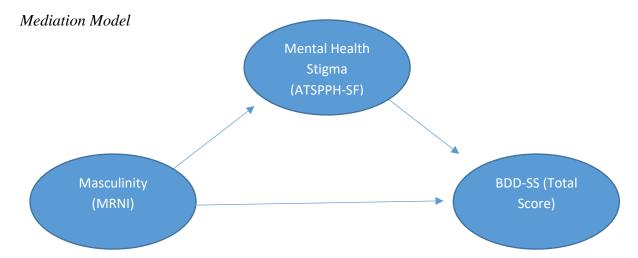


**R3:** To what extent does a person's mental health stigma mediate the relationship between masculinity and BDD-SS total scores?

**H0:** Mental health stigma does not mediate the relationship between masculinity and BDD-SS total scores.

**H3:** Mental health stigma does mediate the relationship between masculinity and BDD-SS total scores.

Figure 3

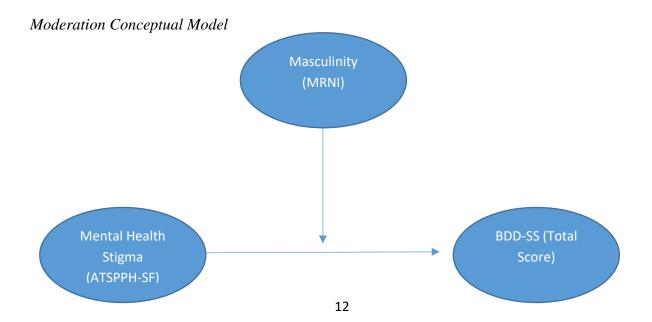


**R4:** To what extent does a person's feelings about masculinity moderate the relationship between mental health stigma and BDD-SS total scores?

**H0:** Masculinity does not moderate the relationship between mental health stigma and BDD-SS total scores.

**H4:** Masculinity does moderate the relationship between mental health stigma and BDD-SS total scores.

Figure 4



#### Chapter II

A MODEL OF MENTAL HEALTH STIGMA AND VIEWS OF MASCULINITY AS CONTRIBUTING FACTORS TO BODY DISSATISFACTION AS MEASURED BY THE BDD-SS

#### **Extended Review of the Literature**

Mental health concerns are of growing focus in the United States as mental health disorders are becoming more prevalent as shown by mental health concerns being the 3<sup>rd</sup> highest cause of hospitalization for those who are between the ages of 18-44 (CDC, 2018). The National Alliance of Mental Illness (NAMI) (2018) has identified that 20% of adolescence 13-18 will develop a mental health related concern over their lifetime. Half of all mental health concerns a person will experience over the lifespan will begin before the age of 14 (Any Mental Illness (AMI) Among Adults, 2018). Of all individuals who are in juvenile corrections facilities, 7-of-10 has a diagnosable mental health concern (Any Mental Illness (AMI) Among Adults, 2018). Roughly 44 million American adults will experience mental health related illness in any given year (Any Mental Illness (AMI) Among Adults, 2018), as well as almost 9 million Americans will experience "serious" mental illness which may cause disturbances in a person's daily life activities (Serious Mental Illness (SMI) Among Adults, 2018). The Center for Disease Control and Prevention (2018) suggested that those who have a serious mental illness have a life expectancy 25 years shorter than that of those who do not have a serious mental illness.

Suicide is a serious concern for young people as suicide is the 3<sup>rd</sup> leading cause of death for individuals ages 10-24 (Any Mental Illness (AMI) Among Adults, 2018). In the United States 9-of-10 individuals who complete suicide had a mental illness (Any Mental Illness (AMI) Among Adults, 2018). As a whole suicide is the 10th leading cause of death in the United States accounting for 113 deaths each day (CDC, 2015).

Although there is a large number of individuals who have many differing mental health concerns, few receive treatment (Any Mental Illness (AMI) Among Adults, 2018). Corrigan, Druss, and Perlick (2014) suggested that in 2011 less than 60% of individuals who have a mental health concern did not seek treatment of any kind. Moreover, only 44.7 million individuals who have any mental illness received treatment in 2016, which equates to 43.1% of the population who has this classification of mental health concerns (Any Mental Illness (AMI) Among Adults, 2018). Of those who have the classification of "serious mental illness" over 35% do not receive the help they may need from a mental health professional (Serious Mental Illness (SMI) Among Adults, 2018). With these statistics in mind, it seems as though there are fewer individuals seeking mental health treatment year after year.

#### **Masculinity**

Traditional gender roles and expectations have been associated with an increase in distress, as well as, a lack of emotional regulation when individuals are put in stressful situations (Addis, 2010). Addis (2010) suggest that these social expectations are main factors which lead men to avoid their negative emotions. Johnson, Oliffe, Kelly, Galdas, and Ogrodniczuk (2012) found that adherence to gender roles and gender ideologies are a factor in both depression and men's willingness to seek mental health. In westernized society men strive to come off as tough

and self-reliant when working through mental health concerns (Davies, McCrae, Frank, Dochnahl, Pickering, Harrison, & Wilson, 2000).

Violence as an aspect of masculinity is only exacerbated by the concept of *toxic* masculinity (Haider, 2016). Kupers (2005) define toxic masculinity as, "involves the need to aggressively compete and dominate others and encompasses the most problematic proclivities in men" (p. 713). Throughout the United States violence has been associated with patriotism as war has been idealized through media (Haider, 2016). However, the concept of violence leading to power tends to lead to a conflicting psyche when war or "socially acceptable" situations of violence are not available (Haider, 2016).

There seems to be a gap in the current literature as it relates to the development of a masculine identity model (Englar-Carlson, Stevens, & Scholz, 2010). Recently there has been a movement in research to shift from the generalizing concept of "masculinity" to a more individual idea of "masculinities." This shift allows for a better framework which helps to view masculine ideas, beliefs, and traits through the different cultural identifications which many men may experience the world.

A common thread associated with masculinity in westernized society has been the foci surrounding the concept of men being in power positions and increased privilege statuses (Englar-Carlson, Stevens, & Scholz, 2010). To suggest that all men have the same cultural reference is to minimize the experiences of racial, sexual/affectual, gender, or ethnic minorities, as well as the intersectionality of these identities. Many men who identify with a marginalized group do not feel the empowerment which society suggested men are supposed to have been afforded (Chin, 2005). In many masculinities height, body frame, and muscularity seem to be

associated with success. The endomorphic/mesomorphic body structure seems to be the most alluring as it suggests that the male is "well built," muscular, lean, and tall. A desire for muscularity has been shown to be positively correlated with an increased desire to adhere to traditional masculine qualities (Blashill, 2011).

In westernized society there seems to be an idea, or governing belief related to what a man is supposed to be and what is acceptable for men to do. Some have identified this as the *masculine hypothesis*, which suggests that a male in westernized society will adhere to a specific set of gender role norm (Griffiths, Murray, & Touyz, 2015). Gender role norms are defined as a set of beliefs, attitudes, and behaviors which are placed on the greater populous set forth by society based on gender binary (Connell, 1995). Some overarching themes of traditional masculinity in westernized cultures are lack of emotions, the ability to isolate, refusal to ask for help, take on a protector role, be the financial bread winner, and be a leader. Griffiths, Murray, and Touyz (2015) state, "... conformity to masculine gender roles including dominance, confidence, success, and physical and emotional self-control places men at risk for muscularity-oriented body dissatisfaction and disordered eating" (p 108).

Many of these themes or ideas are taught to young boys and men through adolescents. This socialization begins almost immediately for many, as babies are referred to as men and in some cases their bodies are describes as big and strong. The idea of socialization and social learning at such a young age may influence a boy's concept of what he should be. It has been identified that if a boy deviates from the gender norm they will be shamed or ridiculed by those around them and in the greater society in an effort to redirect the person back towards the excepted norm (Locksley & Colten, 1979).

#### **BDD** and Mental Illness

It has been documented that many individuals with a diagnosis of BDD will also have "impaired psychosocial functioning" (American Psychiatric Association, 2013, p 245). There are many differing diagnosable disorders that may also manifest as being comorbid with BDD (Gunstad & Phillips, 2003; Fang & Hofmann, 2010; OCD Center of Los Angeles, 2014). Those who have early onset of BDD are more likely to develop a comorbid diagnosis than those who have a later onset of BDD (Bjornsson, Didie, Grant, Menard, Stalker, & Phillips, 2013).

Wylie and Eardley (2007) indicate that there are links between BDD and major depressive symptoms. Also, the OCD Center of Los Angeles (2014) suggests that there are correlations between Obsessive Compulsive Disorder (OCD) and BDD, as the focus of a person's dissatisfaction on a particular body part could be viewed as minimal to individuals around them. Up to 24% of individuals who have a diagnosis of BDD will also qualify for a comorbid diagnosis of OCD (OCD Center of Los Angeles, 2014). BDD has been linked to comorbid diagnosis of Social Anxiety Disorder and bulimia nervosa, where 68.8% of those diagnosed with BDD meet criteria for the diagnosis of SAD (Fang & Hofmann, 2010). Rosen and Ramirez (1998) report that individuals who have a diagnosis of BDD have a 10-33% chance of developing a comorbid eating disorder.

Depressive symptoms, anxiety, anger, and somatic symptomology are all associated with the change in affect that a person goes through when they have BDD (Phillips, Siniscalchi, & McElroy, 2004; American Psychiatric Association, 2013). Grieve and Shacklette (2012) reported that men who have BDD, specifically Muscle Dysmorphia (MD), have depressive symptoms due to their negative self-image which may increase overall feelings of depression.

Negative self-esteem is a major factor associated with BDD as Phillips, Siniscalchi, and McElroy (2004) reported individuals with a diagnosis of BDD in a clinical setting were 1.5 standard deviations bellow the norm when their self-esteem was measured through the use of the Rosenberg Self-Esteem Scale.

BDD can be very disruptive for a person's life as their typical social, academic, and professional functioning is affected by the mood and feelings associated with this diagnosis (OCD Center of Los Angeles, 2014). The Newport Academy (2014) suggested that 97% of people with BDD will avoid particular social situations because of the anxiety they feel due to their perceived "flaw." Individuals who have BDD can also develop some agoraphobic tendencies surrounding the persons desire to avoid being seen as they feel that their foci are too apparent and those around them will mock their "defect" (American Psychiatric Association, 2013).

There is no known etiology for the onset of BDD (Mayo Clinic, 2014; Theravive, 2014), yet the American Psychiatric Association (2013) has identified that there may be a correlation between first generation suffers of BDD and the manifestation of this diagnosis in their children. Fang, Sawyer, Aderka, and Hofmann (2013) suggested that external and internal stimuli, both, may be at the center of the manifestation of a person's negative body image that leads to the development of BDD. The authors of the Diagnostic and Statistical Manual – Fifth Edition (DSM V) state that there may be a causal link between children who experienced neglect or some form of abuse as a child (American Psychiatric Association, 2013).

There are many different ways in which a person's life can be affected by BDD. A person who has BDD will most often develop some sort of "safety-seeking behavior" which allows for

the person to utilize different techniques to protect themselves from the believed ridicule from others due to their perceived deficit (Veale, 2010). One of the most common ways a person will try to avoid the pressure and anxiety that is associated with BDD is by covering up through the use of baggy clothes (Medical Dictionary, 2014). It is suggested that up to 94% of people who have BDD will utilize "covering up" as a coping technique (Medical Dictionary, 2014).

More permanent methods of protection may be taken, as plastic surgeries are not a rare occurrence for individuals who have a diagnosis of BDD as it is reported that 7-8% of U.S. plastic surgeries are performed on these individuals (American Psychiatric Association, 2013). Bohne, Keuthen, Wilhelm, Deckersbach, and Jenike (2002) identified that 12 million U.S. citizens who are diagnosed with BDD also seek augmentations through the use of Botox injections. As well as, 16 % of all individuals who have plastic surgery outside the U.S. meet diagnostic criteria for BDD (American Psychiatric Association, 2013). In some circumstances a previous surgery prior to the development of BDD may help reinforce a person's idea that surgery for a perceived "flaw" would be an outlet (Veale & Bewley, 2015).

One area of particular focus for men, as it pertains to BDD, is their genitals (Wylie & Eardley, 2007). It has been identified that men will focus on dissatisfaction associated with genitals more often than females (American Psychiatric Association, 2013). Many times with men who have a this preoccupation with their penis, BDD is related to their feelings of inadequacies in length and girth due to an unrealistic view of "typical" size (Wylie & Eardley, 2007). However, the majority of men with BDD who wish to change their penis size have an "average" size and symmetry to their penis but perceive there to be a flaw (Vardi, Harshai, Gil, & Gruenwald, 2008). Some men who have BDD will try searching for different avenues to alleviate their distress (Oderda & Gontero, 2011). In some instances some men who have BDD

will take body modification into their own hands by performing at home augmentation (Coskuner & Canter, 2012). In these situations the men will inject fillers into their penis so that they can increase their girth (Coskuner & Canter, 2012). However, these injections have negative side-effects as some men will experience penile deformations associated with the material used and improper usage (Coskuner & Canter, 2012).

Genital augmentation of individuals who have BDD does not just pertain to a man's penis. Ugarte y Romano and González (2013) presented a case identifying that a man who had a diagnosis of BDD and a preoccupation with testicular size underwent augmentative surgery to enlarge his otherwise "normal" sized testicle with a chin implant.

#### **Mental Health Stigma**

There are many benefits psychotherapy, as well as, there are a multitude of modalities which can be utilized to help with a plethora of differing presenting concerns (Wampold, 2001). However, it has been documented that mental health stigma is a major concern facing mental health professionals (Corrigan & Penn, 2015). The term *stigma* has evolved from the first introduction of what we currently know from Goffman's illustration of the "spoiled identity," which was defined as being rejected publicly due to social discrimination in 1963 (Corrigan, Druss, & Perlick, 2014). Public mental health stigma is associated with negative feelings and beliefs that individuals have related to a person who has a mental health concern (Corrigan & Penn, 2015). Link and Phelan (2001) identified that there are 4 characteristics of public stigma: there is a label associated with the stigmatized group, the cladistics used to label are negative in nature, these characteristics are used to separate the "in" group from the "out" group, and these labels associated with the out group leads to the ultimate discrimination of the out group.

When looking at stigma there are two separate focal points associated with the feelings of discrimination: public stigma and self-stigma (Corrigan, Druss, & Perlick, 2014). Self-stigma is the internalization and ultimate belief associated with the public stigma which is associated with mental illness (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001). Self-stigma seems to have a progression of awareness that there is public stigma associated with mental illness, to aligning oneself with the beliefs associated with mental illness, assigning those general beliefs to oneself, and finally reduced feelings of self-esteem (Corrigan, Druss, & Perlick, 2014).

Those who have mental health concerns are more likely to have housing and career concerns that those without mental illness (Corrigan & Shipiro, 2010). The U.S. Department of Housing and Development identified in their 2010 Annual Homelessness Report to Congress (2011) that substance use/abuse disorders and mental health diagnosis are two of the main contributing factors to homelessness in the United States. Parcesepe and Cabassa (2012) identified through meta-analysis that much of the public fears that those who have a mental health related concern are at a higher risk for being or becoming a danger to both themselves as well as others. Many of the articles examined in the meta-analysis, "...explored perceptions of dangerousness, criminality, shame, and blame of children with mental illness and perceptions of incompetency, dangerousness, blame, and punishment of adults with mental illness" (Parcesepe & Cabassa, 2012, p 388).

There are many harmful aspects associated with mental health stigma such as public ridicule and discrimination from peers (Thornicroft, 2006). No matter the mass amount of benefit which psychotherapy may present, Robertson and Williams (2010) identified men were less likely to seek help for mental health concerns as healthcare is seen as only appropriate for women. For many helping professionals, working to help men's mental health can be a challenge

as it has been identified the concept of psychotherapy may be gender atypical (Englar-Carlson, Stevens, & Scholz, 2010). Men are nearly 15% less likely to seek mental health treatment than their female counterparts (Serious Mental Illness (SMI) Among Adults, 2018). Brooks and Good, (2001) assert that toxic masculinity might be a major contributing factor to males resistants' to seek mental health. However, it is not the biology of being identified as a man, but moreover the stigma associated with psychotherapy for men is a socialized phenomenon (Englar-Carlson, Stevens, & Scholz, 2010).

#### **Body Dysmorphic Disorder**

Dysmorphophobia, or Body Dysmorphic Disorder (BDD), is a diagnosable disorder that is associated with the focus of a person's dissatisfaction within themselves as it pertains to a particular body part (American Psychiatric Association, 2013). A person's feelings of dissatisfaction with their body is not a new concept and the term Body Dysmorphia was introduced in the 1880's (Renshaw, 2003). In the early 1800's, German physicians referred the preoccupation with physical appearance as "beauty hypochondriasis" (2003). To be diagnosed with BDD a person's preoccupation with their body part must center on a perceived deficit of "flaw" (Didie, Reinecke, & Philips, 2010; Kaplan, Rossell, Enticott, & Castle, 2013). These "deficits" and preoccupations can focus on any part of a person's body with the most common surrounding hair, nose, skin, physique, chin, face size, teeth, etc. (American Psychiatric Association, 2013).

In the Diagnostic and Statistical Manual of Mental Disorders: 5<sup>th</sup> edition (DSM V) BDD diagnostic criteria is outlined as:

"A) Preoccupation with one or more perceived defects or flaws in physical appearance that are not observable or appear slight to others. B) At some point

during the course of the disorder, the individual has performed repetitive behaviors... or mental acts...in response to the appearance concerns. C) The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning. D) The appearance preoccupation is not better explained by concerns with body fat or weight in an individual whose symptoms meet diagnostic criteria for an eating disorder" (American Psychiatric Association, 2013, p. 242).

These obsessions, which preoccupy the individual's thoughts, also impair the individual's social and societal wellbeing in a particular manner (Didie, Reinecke, & Philips, 2010). Some individuals will develop agoraphobic tendencies and have a lower quality of life (American Psychiatric Association, 2013). In the DSM V (2013) the feelings associated with BDD, "...range from looking 'unattractive' or 'not right' to looking 'hideous' or 'like a monster'" (p 243). A low self-esteem and a lack of self-worth are associated with individuals who report symptoms of BDD (Phillips, Siniscalchi, & McElroy, 2004), as well as, a person may become more introverted as time goes (American Psychiatric Association, 2013).

There are many differing behaviors which are associated with BDD: reflection checking, chronic grooming, picking, "sizing up" or "comparing," and validation seeking are some of the most common (American Psychiatric Association, 2013). Other behaviors include: camouflage, mirror avoidance, picture avoidance, drop in academic performance, and trichotillomania tendencies (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010; Blau, 2014; OCD Center of Los Angeles, 2014). It has been identified that in some cases people will utilize other accessories, such as hats, to divert people's eyes from a perceived facial deficit (Grant & Phillips, 2005).

General preoccupation and time devoted to one's body and body image has begun to rise amongst many individuals in current society (Theravive, 2014). As well as, the rates among college age individuals are upwards of 12% higher than the general populous (Bohne, Keuthen,

Wilhelm, Deckersbach, & Jenike, 2002). It has been documented that many people believe that BDD is primarily a diagnosis that hits women harder than it does men, and in part this could be associated with the fact that women have been the main focus of BDD research (Dakanalis et al., 2014). However, although the rates of BDD are rising, Buhlman (2010) stated that there is no statistical difference between men and women in rates of prevalence of BDD. In conjunction with Buhlman's findings the authors of the DSM V suggest that the prevalence rates for men are .3% lower than that of women (American Psychiatric Association, 2013). American Psychiatric Association (2013) goes on to suggest that BDD symptomology is similar no matter where the person falls on the gender continuum.

The prevalence rates of body dissatisfaction among men are high, however the rates among sexual minority men are even more elevated (Peplau, Frederick, Yee, Maisel, Lever, & Ghavami, 2008). Duggan and McCreary (2004) suggest that gay men may have higher body dissatisfaction revolving around their desire for muscularity so that they may show their masculinity. There are also negative psychological effects of MD among sexual minority men, as Chaney (2008) identified that this population is at a higher risk of loneliness and negative self-esteem associated with MD than heterosexual men. Men who have MD symptomology have been shown to have an increased adherence to traditional masculine traits (Murray, Rieger, Karlov, & Touyz, 2013). There seems to be a clear connection between muscularity and masculinity as Blashill (2011) states, "... it appears that aspects of masculinity such as placing an emphasis on winning, emotional control, risk-taking, violence, dominance, power over women, and pursuit of status, seem to place men at risk for higher levels of dissatisfaction with their muscularity" (p 9).

With this stated BDD is not just a Westernized phenomenon as the desire for bodily perfection has become globalized (Prazeres, Nascimento, & Fontenelle, 2013). Although, it has been identified that the U.S. BDD prevalence rates are higher, BDD is still a concern in other parts of the world (Bohne, Keuthen, Wilhelm, Deckersbach, & Jenike, 2002). German men have a similar rate of prevalence and a similar rate compared to German women (American Psychiatric Association, 2013). It is documented that throughout the world there are individuals who meet the criteria for a diagnosis of BDD as shown by the fact that the Japanese version of the DSM V has a category named *shubo-kyofu*, which translates to "the phobia of a deformed body" (American Psychiatric Association, 2013, p 245).

In many cases the common public does not know about BDD and the effect that this mental illness causes for many individuals (Kaplan, Rossell, Enticott, & Castle, 2013). BDD can take shape in many differing ways as people who suffer from BDD: mirror check consistently, avoid their reflection, refuse pictures of themselves, continually groom, wear baggy clothing, see the doctor regularly, and partake in augmentative surgery (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010; OCD Center of Los Angeles, 2014). Individuals with BDD can spend hours a day fixating on their "flaws" or "blemishes" (Theravive, 2014).

BDD goes beyond just body dissatisfaction as 33% of those with BDD have delusional images of their body (American Psychiatric Association, 2013). Individuals who have BDD have high rates of psychiatric hospitalization, suicidal ideations, and attempted suicide (Phillips, Siniscalchi, & McElroy, 2004). Suicidality is high both in children and adults who have BDD with those who have early onset of BDD running the highest risk for suicide attempts (American Psychiatric Association, 2013). Bjornsson, Didie, Grant, Menard, Stalker, and Phillips (2013) identified that individuals who had an early onset of BDD symptomologies are twice as likely to

have a suicide attempt then those who have a later onset of the disorder. It has been reported that individuals who have BDD in the United States are 45 times more likely to attempt suicide than the general populous (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010).

BDD most often manifest while an individual is an adolescent, as 66% of all individuals who will have BDD will be diagnosed before the age of 18 (American Psychiatric Association, 2013). The most prominent age for symptomology onset is between the ages of 12-13 (American Psychiatric Association, 2013; Bjornsson, Didie, Grant, Menard, Stalker, & Phillips, 2013). Yet, many individuals who have BDD will not receive treatment for the disorder for up to a decade after the initial symptomology (Veale & Bewley, 2015). It has been identified that BDD may affects as much as 13% of the U.S. population (Kaplan, Rossell, Enticott, & Castle, 2013), however the authors of the DSM V suggested that the prevalence is 2.4% in U.S. adults (American Psychiatric Association, 2013). Koran, Abujaoude, Large, and Serpe (2008) identified that BDD prevalence may be as high as 5 times that of eating disorders such as anorexia nervosa. Kaplan, Rossell, Enticott, and Castle (2013), state that BDD is as prevalent as schizophrenia and bipolar disorder, as well as, anorexia.

#### Muscle Dysmorphia

A subset of BDD is muscle dysmorphia (MD) (American Psychiatric Association, 2013) which seems to receive the mass amount of research interest in terms of population of men who have BDD. Pope, Gruber, Choi, Olivardia, and Phillips (1997) indicated that MD may affect as many as 9.3% of the U.S. population. The DSM V (2013) suggests that MD is primarily a male dominated diagnosis. Dakanalis et al. (2013) identified that the majority of men who have some form of BDD focus primarily on their muscularity and size. MD is also seen as a desire to gain

only lean mass while decreasing adiposity (Pope, Gruber, Choi, Olivardia, & Phillips, 1997; Choi, Pope Jr., & Olivardia, 2002), and this lack of muscularity may result in a lower reported quality of life (Tod & Edwards, 2015). Much of the preoccupation for men revolves around the desire to increase bulk in the upper body, in particular the chest and shoulders (Dakanalis & Riva, 2013). In conjunction with these regions, is the aspirations of increasing bulk in the calves, gastrocnemius and soleus muscles (Ridgeway & Tylka, 2005). With the desire to become muscular, so is there a desire to be lean (Smolak, Murnen, & Thompson, 2005).

Many individuals attribute the growing dissatisfaction with one's body to mass media (Smolak, Murnen, & Thompson, 2005; Yeh, Liou, & Chien, 2011; Haas, Pawlow, Pettibone, & Segrist, 2012). However, there can also be external factors such as family and peers that begin to fester as internal beliefs about oneself (Smolak, Murnen, & Thompson, 2005). Both environment and genetic links have been found in those who have been diagnosed with BDD (American Psychiatric Association, 2013).

When an individual is diagnosed with having BDD there is a specifier associated with the individual's insight (American Psychiatric Association, 2013), as well as, there are differing levels of severity (Veale, 2010). An individual may be classified as having good or fair insight which is classified as, "the individual recognizes that the body dysmorphic disorder beliefs are definitely or probably not true or that they may or may not be true" (2013, p 243). A person who is classified as having poor insight believes the BDD thoughts and occupations are more than likely not accurate (American Psychiatric Association, 2013). A person with absent or delusional beliefs may feel or believe fully that their BDD thoughts are accurate and people judge them based on their perceived "flaw" (American Psychiatric Association, 2013).

Recently there has been a shift in focus regarding researcher's attitudes as there has been time devoted and effort put forth towards the exploration of identity development (Sue & Sue, 2008). Through the exploration of individual differences intersectionality which makes up the context of our life, gender has been identified as a factor in which our identity as a person is developed (Englar-Carlson, Stevens, & Scholz, 2010). Yet, through much of the early years of gender research the term "gender" was associated primarily with the lived experiences of women and the exploration of femininity through women's context (Addis, 2008).

BDD and body dissatisfaction seems to be a growing area of research, but there is still few studies looking at males as a collective group, as well as outside the scope of MD. To identify possible contributing factors to body dissatisfaction in males, we must first examine the lens in which males may see the world. To adjust the lens in which males view their roles in society the concept of masculinity must be addressed.

The majority of research in BDD has been focused on females and their feelings associated with body image (Dakanalis et al., 2014). Research must be furthered in the area of BDD in men. Body image concerns are not just issues for the male youth, but also for adult men (Cramblitt & Pritchard, 2013). Cramblitt and Pritchard (2013) identified that 70% of college males have some feelings of body dissatisfaction. Further research could only help grow the body of literature surrounding BDD. This growth could help alleviate some of the stereotypes surrounding BDD, as well as, some eating disorders

#### Prognosis for those who Seek Help

BDD is a very prevalent mental disorder (American Psychiatric Association, 2013; Kaplan, Rossell, Enticott, & Castle, 2013). BDD has been known to be very debilitating for

Individuals who have been diagnosed and for those who have not sought help (American Psychiatric Association, 2013). It is essential that education be implemented in schools (Yeh, Liou, & Chien, 2011), as well as teachers become competent in the identification of symptomologies of BDD (Mayo Clinic, 2010). Families and friends can be a positive and negative system of change for individuals who have BDD (Marques, Weingarden, Leblanc, Siev, & Wilhelm, 2011). Therefore psychoeducation is a must for any treatment associated with BDD both for the person (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010) and their family (Blau, 2014). When identified, it may be necessary to utilize medication (Grant & Phillips, 2005) in conjunction with psychotherapy (Medical Dictionary, 2014). Overall, BDD is a very complex disorder that effects both men and women alike (American Psychiatric Association, 2013), and one of the best methods of combating this disorder is through the utilization of many different avenues and the work of many different disciplines.

With the increased understanding of BDD and the prevalence of this psychologically debilitating disorder, psychotherapy has been shown to be effective in the treatment of individual who have this diagnosis (Grant & Phillips, 2005; Veale, 2010; Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010; OCD Center of Los Angeles, 2014; Veale & Bewley, 2015). For individuals who have a diagnosis of BDD, Cognitive Behavioral Therapy (CBT) has been suggested as useful method of therapy (Grant & Phillips, 2005; Veale, 2010; Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010; OCD Center of Los Angeles, 2014; Veale & Bewley, 2015). However, individuals who have BDD are not likely to see a mental health professional unless there is comorbid with another diagnosis which they may see as more pressing (Veale & Bewley, 2015). The National Institute of Health and Clinical Excellence (NICE) has developed a step wise approach to treating individuals with BDD based primarily in

the roots of CBT (NICE, 2014). The duration of therapy is not necessarily identical for every client as Veale (2010) indicated that sessions will last 12-16 weeks. However, Wilhelm, Buhlmann, Hayward, Greenberg, and Dimaite (2010) suggested that the mean duration is somewhere between 18-22 sessions. Most therapists will meet with the client once a week for counseling when utilizing CBT with a client who has BDD (Veale, 2010).

One of the most important elements of helping individuals with BDD is through psychoeducation (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010). Through this education a person may begin to understand that BDD is a disorder that extends beyond the a mere dislike of themselves (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010) and may have manifested years before the symptoms began to intensify (Bjornsson, Didie, Grant, Menard, Stalker, & Phillips, 2013). While utilizing education a therapist may have the capabilities of addressing and solidifying the idea that BDD can be progressive and slowly cause debilitating consequences on a person's life (American Psychiatric Association, 2013). This further understanding may help the person see that this illness could cause further harm in the future (Veale, 2010).

When utilizing CBT techniques a therapist will most often assign "experiments" for the client to do outside of session (Veale, 2010). Some of these experiments will focus on shifting the clients focus from external preoccupations which may lead to emotional distress (Veale et al., 1996). Wilhelm, Buhlmann, Hayward, Greenberg, and Dimaite (2010) suggest that one of the best experiments to accomplish this cognitive restructuring is through setting reflection limits with the client. As well as, clients who have concerns surrounding feelings of judgment in social settings are urged to work on these emotions through the use of exposures (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010).

Insight is key when a therapist is trying to help facilitate change within a person who has BDD (Veale, 2010). As stated previously, within the DSM V there are insight specifiers for each person with BDD (American Psychiatric Association, 2013). To exam the insight a person and their therapist may delve into how the person's behaviors surrounding BDD is effecting the person's social interactions (Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010). The severity of BDD can also determine the best plan of action for the therapist (Veale, 2010). For individuals who have mild BDD, bibliotherapy has been used to both help with current behaviors and to create autonomy for the individual (Veale, 2010).

Veale & Bewley (2015) identified that individuals who are diagnosed with BDD have been seen by, "...general practitioners; dermatologists; cosmetic, ear, nose, and throat, and maxillary facial surgeons; orthodontists; gynecologists; or urologists with a desire to improve their defect" (p 1). However, in many cases people with BDD will not reveal to their medical care personal that they have these feelings or to what degree their BDD has impacted their lives (Veale & Bewley, 2015). This is a major reason as to why the prevalence of BDD and the signs of the disorder need to be brought to light for the public and professionals alike.

Group counseling may be of benefit for people who have BDD (Wilhelm, Otto, Lohr, & Ceckersback, 1999). Rosen, Reiter, and Orosan (1995), identified that up to 82% reported improved symptomology after attending eight weeks of CBT group therapy. If a person has severe BDD they may need the assistance of mediation (Veale, 2010). The use of medication for individuals with BDD mirror that of OCD as the two disorders have been identified as having some of the same characteristics (Hollander, 1993). The most common utilized medications are selective-serotonin-reuptake inhibitors (SSRI) with Prozac and Zoloft begin the most successful in decreasing anxiety among those with BDD (Medical Dictionary, 2014). The use of SSRI

medications has been associated with the lessening of appearance preoccupations after 10-12 weeks of use, as well (Grant & Phillips, 2005). Medication is said to be best used when utilized with psychotherapy (Medical Dictionary, 2014).

There is limited research in the area of social supports and the effectiveness with individuals with BDD. With that stated, in a study of 400 individuals who were recruited from internet websites and social media outlets it was determined that access to face to face social supports can be beneficial in reducing some of the feelings of despair associated with BDD (Marques, Weingarden, Leblanc, Siev, & Wilhelm, 2011). Therefore, it may be deduced that families and friends may benefit from psychoeducation alongside the family member who has the diagnosis of BDD. Through this psychoeducation with the families and parents it is vital that empathy be stressed, as judgement may lead to the individuals symptoms only strengthening and feelings of isolation only further solidifying (Blau, 2014). Family members must understand that BDD differs drastically from mere body dissatisfaction, as BDD has been found to be associated with many differing comorbid disorders and suicidal ideations (Newport Academy, 2014).

Education can help combat body image concerns in young people (Yeh, Liou, & Chien, 2011). Elementary programs have been created to help in the teaching and understanding of body image and the recognition of healthy body shape (Kater, Rohwer, & Levine, 2000). Kater, Rohwer, and Levine (2000) identified that these curriculum included: identifying genetic factors, healthy weights, healthy eating habits, reduced emphasis on physical appearance, and the understanding of social influences on body image.

Along with education teachers may benefit from further understanding the signs of BDD, as early detection has been identified as being a key to treatment (Mayo Clinic, 2014). Once

symptoms have emerged and have been noticed it would be in the persons best interest to be referred to a mental health professional (Balu, 2014). Once this alliance has been formed, it is essential for the social support networks to work in conjunction to help the person with BDD.

## Chapter III

# A MODEL OF MENTAL HEALTH STIGMA AND VIEWS OF MASCULINITY AS CONTRIBUTING FACTORS TO BODY DISSATISFACTION AS MEASURED BY THE BDD-SS

# Methodology

# **Participants**

All participants for this study self-identified as being 18 years of age or older, participation was voluntary as each participant agreed to participate via electronic informed consent, and participants could have elected to terminate the survey if they so choose. The Qualtrics survey began with the introduction of the Informed Consent document. This document outlined the participant's rights as they pertained to participation in the research. Included in the Informed Consent document was a statement which illustrated participation was voluntary and the participant could stop the survey at any time without any repercussions. Once the participant finished reading the Informed Consent document they were instructed to mark either "Yes" or "No." A "Yes" response indicated that the participant read and agreed to participate in the survey. By selecting "No" the participant skipped to the end of the survey, and they were thanked for their time and consideration in regards to the current study.

Participants completed the survey online from a location in the United States to ensure that a wide range of region, ethnicity, and cultural backgrounds were included. There has been some movement among researchers of masculinity to incorporate all genders as the concept of masculinity does not just affect those who identify as male, but everyone who has someone in their life who identifies as a male (Whorley & Addis, 2006). For this reason, people of all genders were invited to participate in this research. The minimum number of participants was

determined to be 150 individuals. This is sample size was based on Hogg & Tanis (2005) who suggested that the n=25 - 30 per construct being evaluated was enough to reach significant power.

SPSS Version (24.0) was utilized to analyze demographics for the sample. The mean age for the sample in the current study was 22.84 years (SD=7.296). The highest level of education attained was: no formal education (0.24%), did not graduate from high school (0.24%), high school graduate or GED (37.68%), some college/associates degree/technical school training (43.24%), college graduate (B.A./B.S.)(6.76%), some graduate school (3.62%), Master's Degree (5.56%), and Doctorate/Medical Degree/ Law Degree (2.66%).

Table 1

Highest Level of Education

				Cumulative
		Frequency	Percent	Percent
Valid	No Formal Education	1	0.3	0.3
	Did Not Graduate from High School	1	0.3	0.6
	HS Graduate or GED	151	38.1	38.6
	Some College	179	44.4	83.1
	College Graduate	28	5.8	88.9
	Some Graduate School	15	3.5	92.4
	Master's Degree	23	5.6	98.0
	Doctorate/Medical/Law Degree	11	2.0	100
	Total	396	100.0	

The reported race of the participants was as follows: White, not of Hispanic Origin (70.7%), Black/African American (9.8%), Hispanic/Latino (5.8%), Asian/Pacific Islander (5.1%), and American Indian/Alaskan (4.8%). The sample also had those who preferred not to answer the race question and those who identified as "Another Race" with each of these categories consisting of 2.0% of the total sample or less. The majority of the participants

identified as female, 61.4%, with the second highest gender identity being male, 37.4%, and the remaining 1.3% of participants identified as either Transgender (F-M) or Gender Non-Conforming.

Table 2

Race

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Black/African American	39	9.8	9.8	9.8
	Hispanic/Latino	23	5.8	5.8	15.7
	White, not of Hispanic Origin	280	70.7	70.7	86.4
	Asian/Pacific Islander	20	5.1	5.1	91.4
	American Indian/Alaskan	19	4.8	4.8	96.2
	Another Race/Ethnicity	8	2.0	2.0	98.2
	Prefer Not to Answer	7	1.8	1.8	100.0
	Total	396	100.0	100.0	

Table 3

Gender Identity

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Male	148	37.4	37.4	37.4
	Female	243	61.4	61.4	98.7
	Transgender (M-F)	0	0	0	98.7
	Transgender (F-M)	2	.5	.5	99.2
	Gender Non-				
	Conforming	3	.8	.8	100.0
	Total	396	100.1	100.1	

A large portion of the sample (88.4%) identified as residents of the West South Central (AR, LA, OK, TX) region of the United States. Of the remaining regional locations of residence, the South Atlantic (DE, FL, GA, MD, NC, SC, VA, DC, WV) was the second most identified with 11 participants indicating that they reside in these states. Data regarding reported yearly

income was also collected. The majority of the sample identified that they made \$10,000 or less (69.4%) with the second highest reported income being \$10,001-\$20,000 (10.4%). The remaining 20.8% reported annual earnings in excess of \$20,000.

Table 4

Region of the U.S.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	New England	7	1.8	1.8	1.8.
	Mid Atlantic	8	2.0	2.0	3.8
	East North Central	3	0.8	0.8	4.5
	West North Central	5	1.3	1.3	5.8
	South Atlantic	11	2.8	2.8	8.6
	East South Central	2	0.5	0.5	9.1
	W. South Central	350	88.4	88.4	97.5
	Mountain	8	2.0	2.0	99.5
	Pacific	2	0.5	0.5	100.0
	Total	396	100.0	100.0	

Table 5

Income

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	\$10,000 or less	275	69.4	69.4	69.4
	\$10,001 to \$20,000	41	10.4	10.4	79.8
	\$20,001 to \$40,000	30	7.6	7.6	87.4
	\$40,001 to \$60,000	18	4.5	4.5	91.9
	\$60,001 to \$80,000	13	3.3	3.3	95.2
	Over \$80,000	19	4.8	4.8	100.0
	Total	396	100.0	100.0	

The sample of participants was primarily comprised of those who identify as heterosexual (91.9%), with those who identify as bisexual being the second highest sexual orientation (2.5%). Only 22 participants of the 396 identified their sexual orientation as something other than heterosexual or bisexual.

Table 6
Sexual Orientation

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Did Not Answer	2	0.5	0.5	0.5
	Heterosexual	364	91.9	91.9	92.4
	Gay	6	1.5	1.5	93.9
	Bisexual	10	2.5	2.5	96.5
	Lesbian	4	1.0	1.0	97.5
	Queer	4	1.0	1.0	98.5
	Asexual	3	0.8	0.8	99.2
	Pansexual	3	0.8	0.8	100.0
	Omnisexual	0	0.0	0.0	
	Total	396	100.0	100.0	

#### Procedure/Data Collection

The criteria for eligibility of participation was included in all recruitment materials. Data was collected through the use of a Qualtrics survey software. Individuals who met appropriate criteria were asked via informed consent to agree or discontinue the survey at that time.

Participants were notified that by agreeing to continue beyond the informed consent page was an agreement to participate in the research study. Those participants who acknowledged that they would like to continue the survey were invited to participate in the study and demographic information and key measures of interest were collected. Participants were made aware through the informed consent they could discontinue the survey at any time.

#### Measurements

All items were provided through Qualtrics. An online survey was utilized to insure the greatest possibility for casting a wide net regarding regional demographics. The Qualtrics survey included an informed consent, demographics section, the Body Dysmorphic Disorder-Symptom Scale (Wilhelm, Greenberg, Rosenfield, Kasarskis, & Blashill, 2016), Male Role Norms Inventory-Short Form (Levant, Hall, & Rankin, 2013), and Attitudes Toward Seeking Professional Psychological Help-Short Form (Fischer and Farina, 1995). This Qualtrics survey was distributed via Oklahoma State University: College of Education-SONA system as well as social media outlets. The entirety of the survey was estimated to take between 30-45 minutes.

# Demographics Questionnaire.

The demographics section of the survey included items pertaining to biological sex, gender, education, ethnicity, region of the United States the participant lived in, age, and sexual orientation. Frequencies, percentages, and response options can be located in Tables 1-6.

Male Role Norms Inventory-Short Form. (MRNI-SF): (Levant, Hall, & Rankin, 2013)

The MRNI-SF consists of 21 items, intended to measure adherence to traditionally masculine societal roles. The 21 items are derived from the initial Male Role Norms Inventory-Revised which consisted of 39 items, incorporating 7 subscales (Levant, Rankin, Williams, Hasan, & Smalley, 2010). To select the items for the MRNI-SF Levant, Hall, and Rankin (2013) took the three highest loaded items from the 7 subscales of the MRNI-R. The understanding was that these loaded factors would allow for the continued structure of the 7 subscales which were identified in the MRNI-R (Levant, Hall, & Rankin, 2013). The MRNI-SF consists of 7 subscales: Restrictive Emotionality, Self-Reliance through Mechanical Skills, Negativity toward Sexual Minorities, Avoidance of Femininity, Importance of Sex, Toughness, and Dominance (Levant, Hall, & Rankin, 2013). The MRNI-SF was measured using a 7 point Likert scale (1=strongly disagree, 7=strongly agree) (Levant, Hall, & Rankin, 2013).

The MRNI-SF was normed on a sample of 1,017 college individuals (549 men, 468 women), with ages ranging from 18-59 (Levant, Hall, & Rankin, 2013). The mean age of the sample was 21.18 years (SD= 5.00). It is important to note that 94.8% identified as heterosexual, 2.1% gay/lesbian, 1.8% bisexual, and 1.4% did not answer this demographic question (Levant, Hall, & Rankin, 2013). Ethnicity was categorized into 8 categories, however only three percentiles were published in the Levant, Hall, and Rankin (2013) article: White/European American (82.9%), Black/African American (9.1%), and Latino(a)/Hispanic, Asian/Asian American, American Indian, Pacific Islander/Inuit, Middle Eastern, or bi/multiracial (6.7%).

Internal consistencies for the MRNI-SF subscales were reported using Cronbach's Alpha for both men and women. The internal consistencies for men ranged from .79 (Toughness) to .90

(Avoidance of Femininity). These scores represented internal consistencies ranging from acceptable to excellent. The internal consistencies for women ranged from .75 (Toughness) to .88 (Avoidance of Femininity). These scores represented internal consistencies ranging from acceptable to good. This indication suggested that this instruments subscales were reliable for both men and women.

The authors of the MRNI-SF measured convergent validity for this scale against the Male Roles Norm Inventory-Revised (MRNI-R) and identified that there was significant correlation.

The authors suggested that there was evidence for discriminant validity against the Masculinity Scale of the personal Attributes Questionnaire which examined personality traits rather than normed beliefs.

Attitudes Toward Seeking Professional Psychological Help-Short Form, (ATSPPH-SF), (Fischer and Farina, 1995); http://psycnet.apa.org/record/1996-10056-001

The ATSPPH-SF is a 10 item self-report measure. The ATSPPH-SF was derived from Fischer and Turner (1970) original Attitudes Toward Seeking Professional Psychological Help scale which consisted of 29 items. This measure was utilized to examine the participants feelings associated with the potential for seeking mental health for possible mental health concerns. The ATAPPH-SF utilized a 4 point Likert type scale (0= "Disagree" and 3= "Agree"). The scores ranged from 0-30 with lower scores representing a negative attitude towards seeking mental health treatment and increased mental health stigma (Elhai, Schweinle, & Anderson, 2008).

Fischer and Farina (1995) stated that the psychometric properties of the shortened form of the ATAPPH were similar to those of the original 29 item scale. A coefficient alpha of .84 was identified for internal consistency. Test-retest method was also utilized to identify the

reliability of this measure with a reliability coefficient of .80 using a 4-week interlude. With a correlation coefficient alpha of .80, the ATAPPH-SF was said to have a "Very Good" correlation in regards to test-retest reliability (Salkind, 2010).

Elhai, Schweinle, and Anderson (2008) attempted to update the norm sample group for the ATSPPH-SF. The norm sample was drawn from a Midwestern college campus with the sample containing results from 296 students, as well as 389 participants form a mental health clinic on campus (Elhai, Schweinle, & Anderson, 2008). The mean age of the norm population from the student sample was M=20.7 with an age range of 18-42 years of age, while the mean age for the clinic sample was M=47.3 with a range of 18-90. The authors determined that there was adequate internal consistency (a=.72), and after running factor analysis the authors identified a two-factor model which included Openness to Seeking Treatment for Emotional Problems, and Value and Need in Seeking Treatment (Elhai, Schweinle, & Anderson, 2008).

To examine criterion validity among college age individuals, Elhai, Schwenle, and Anderson (2008) examined the relationship between those who had sought mental health services in the last 6 months and those who had not recently utilized mental health services. The research team found that those who had recently seen a mental health practitioner had higher scores on the ATSPPH-SF, indicating that they had less mental health stigma, than their non-use counterparts.

Body Dysmorphic Disorder-Symptom Scale. (BDD-SS): (Wilhelm, Greenberg, Rosenfield, Kasarskis, &Blashill, 2016)

This instrument was created to assess body image concerns and compulsions associated with symptomatology of Body Dysmorphic Disorder (BDD). The BDD-SS was normed on 99

adults who had previously been diagnosed with BDD using DSM IV-TR diagnostic criterion, clinical interview, and had a minimum score of 20 on the Body Dysmorphic Disorder-Yale-Brown Obsessive-Compulsive Scale (BDD-YBOCS). The BDD-YBOCS is a modified version of a popular, validated obsessive compulsive measure which did not necessarily include prominent foci on symptomatology prevalent in BDD. The sample population were all recruited from the Massachusetts General Hospital OCD and Related Disorders program over a nine year period from 2004-2013. Each participant was given the questionnaire once, prior to beginning the treatment program at the hospital. Of the sample population, 58% identified as female and 83.8% identified as white. The mean age of the sample population was 30.7 years (*SD*= 11.2). The items for the BDD-SS were created by subject experts in the field who had specialty related to BDD, as well as constructs associated with the compulsive rituals commonly ascribed to by those who had BDD. To assure content validity additional expert clinicians from the Massachusetts General Hospital OCD and Related Disorders were asked to review the items utilized in the BDD-SS.

The BDD-SS is comprised of 54 differing symptoms arranged into 7 similar symptom categories: checking rituals, grooming rituals, shape/weight-related rituals, hair pulling/skin picking rituals, surgery/dermatology seeking rituals, avoidance, and BDD-related cognitions. Each of these categories contained 2-19 different symptoms. Each of the 54 items were answered with a Yes/No response in regard to the participant's behavioral or cognitive symptomology over the last week. If a category of symptoms had at least one "Yes" response, the participant was asked to rate the severity of the category of symptoms on a 0-10 scale (0= *no problem*; 10= *very severe*). When scaling severity it was important that the participant know that they were scaling the severity of the entire category of symptoms and not just the mean score of the individual

symptoms associated with a category. The BDD-SS had two separate summary scores: BDD-SS Severity (the sum of the severity identified for each category) and BDD-SS Symptom (the sum of the total number of symptoms from all 54 items).

Internal consistency was examined via KR-20, which could be interpreted identically to Cronbach's alpha for dichotomously scaled items (Wilhelm, Greenberg, Rosenfield, Kasarskis, &Blashill, 2016). The mean inter-item correlations were used as KR-20 could be affected significantly by the number of items within a subscale (Wilhelm, Greenberg, Rosenfield, Kasarskis, &Blashill, 2016). Wilhelm, Greenberg, Rosenfield, Kasarskis, and Blashill (2016) stated that the KR-20 scores ranged from .29 (Picking/Plucking) -.82 (Cognitions), but the authors identified that the low KR-20 for (Picking/Plucking) could've been due to the subscale only including two items. When examining the inter-item correlations, the ranges fell between .12 (Avoidance) - .40 (Weight/Shape) (Wilhelm, Greenberg, Rosenfield, Kasarskis, &Blashill, 2016). With further examination all subscales fell within the .15 - .50 average range of inter-items correlation identified by Clark and Watson (1995) except for the "Avoidance" subscale.

To measure validity the authors of the BDD-SS utilized both convergent and divergent validity measures against both the BDD-SS severity and BDD-SS symptoms (Wilhelm, Greenberg, Rosenfield, Kasarskis, &Blashill, 2016). These two categories were measured against the Multidimensional Body-Self Relations Questionnaire (MBSRQ) Appearance Scales: Appearance Evaluation (-AE) and Appearance Orientation (-AO), the Brown Assessment of Beliefs Scale (BABS), Yale Brown Obsessive Compulsive Scale modified for BDD (BDD-YBOCS), and the Beck Depression Inventory (BDI-II). Upon examination, the BDD-SS severity was positively correlated with BDD-SS symptoms (.55), BDD-YBOCS (.46), MBSRQ-AO (.37), and BDI-II (.26) at a significance of .05 or lower. These scores suggested that there were weak

(.20-.39) to moderate (.40-.59) correlations among these measures when using Pearson Correlation Coefficients. The BDD-SS symptoms scales were correlated with all measures chosen: BDD-SS severity (.55), BDD-YBOCS (.64), MBSRQ-AO (.42), MBSRQ-AE (-.30), BABS (.24), and BDI-II (.32) at a significance of .05 or lower. This indicated weak correlations with the BABS, MBSRQ-AE, and BDI-II, a moderate correlation with MBSRQ-AO and the BDD-SS severity, and a strong correlation (.60-.79) with the BDD-YBOCS.

#### **Procedures**

Participants were recruited utilizing IRB approved recruiting methodologies (see Appendix A). Participants were recruited from in class scripts, on campus fliers, institutional research systems, email scripts, and social media outlets. The inclusion of social media and email recruitment allowed for a more robust sample, thereby allowing for increased generalizability of the sample. Those who had the access to institutional research system received some form of school credit for their participation.

# Data Analysis

All data responses were limited to include participants who finished the survey in full. The data was examined using SPSS (24) Statistics Software and both mediation and moderation analysis were conducted using the addition Process macro for SPSS (Hayes, 2018). Throughout the survey, integrity check questions were used to ensure adequate attention through the completion of the study (i.e. "Mark 'No Opinion' for this statement, "Mark 'Partially Agree' for this statement, and "Please Choose Option C"). Respondents who did not adequately respond to two validity questions correctly were not included in the data analysis.

H1: Mental health stigma does mediate the relationship between masculinity and BDD-SS total scores.

To examine H1, three regression models were conducted. The first regression model examined masculinity (MRNI) predicting BDD-SS total score. The second regression model examined masculinity predicting mental health stigma (ATSPPH-SF). The third regression model used both masculinity and mental health stigma to predict BDD-SS total score. To measure the variance within the model, the R-squared statistic was utilized. It was hypothesized that mental health stigma mediated the relationship between masculinity and BDD-SS total score. Statistical tests were conducted to ensure that the assumptions of linearity, data set independence, normality of residuals, and multicollinearity were met. Significance was assessed via the F statistic for these regression models. Statistical significance was assessed at alpha of 0.05. In this regression model, masculinity was serves as the predictor variable, mental health stigma served as the mediator variable, and the BDD symptomology served as the dependent variable. The regression coefficient identified the strength and direction of the relationships between the predictor variables and the outcome variable.

H2: Masculinity does moderate the relationship between mental health stigma and BDD-SS total scores.

A moderation analysis was conducted using masculinity (MRNI) as the moderator between the *IV* mental health stigma (ATSPPH-SF) and the *DV* BDD-SS (Total Score). Multiple linear regressions were run to identify the relationship the moderating variable had on the *IV-DV* relationship. To examine the interaction of the model mental health stigma (*IV*) and masculinity

(*Moderator*) were multiplied once their means were centered to zero. Moderation was supported when a significant interaction was found at an alpha level of .05.

# Chapter IV

A MODEL OF MENTAL HEALTH STIGMA AND VIEWS OF MASCULINITY AS CONTRIBUTING FACTORS TO BODY DISSATISFACTION AS MEASURED BY THE BDD-SS

# **Findings**

The original total sample size for all individuals who participated was 440. These participants were recruited from a variety of methodologies to increase the regional demographic. The original sample was then reduced so that those who did not agree to participate via the informed consent, inadequate for the integrity check questions, or those who did not complete the survey were removed from the final sample. Throughout this process, 44 participants were dropped from the study: 2 did not endorse their agreement of the informed consent, 8 did not answer at least two validity questions correctly, and 34 participants did not complete the survey in its entirety. After the removal of these participants, the final total sample was n=396. For research question 1: only those who identified as male were used, n=148. For research question 2: only those who identified as male or female were used, n=391, research questions 3 and 4, the total sample size n=396 was used.

A reliability analysis was calculated for all three measures used in this study (MRNI-SF, ATSPPH-SF, and the BDD-SS). For the MRNI-SF total score, a Cronbach's alpha ( $\alpha$  = 0.940) was calculated, indicating excellent reliability for this measure. The MRNI-SF had 7 subscales which Cronbach alpha reliability scored from  $\alpha$  = 0.775 (Toughness) to  $\alpha$  = 0.903 (Negativity toward Sexual Minorities). These scores indicated that the reliability for these measures ranged

from acceptable (>.7) to excellent (>.9). ATSPPH-SF was determined to have a Cronbach's alpha score,  $\alpha = 0.837$ , indicating good reliability. Internal consistency for the measure BDD-SS Total Score was calculated using a KR-20 analyses, with a KR-20 score = 0.904, indicating excellent reliability.

It was determined through checking of assumptions that the assumption of normality was not met. Both a Log Transformation and Square Root Transformation were conducted to address this concern.

#### Research Questions

The first research question was, to what extent does a male's mental health stigma mediate the relationship between masculinity and BDD-SS total scores? Through a mediated regression model run through Process (Hayes, 2018), it was identified that the relationship between a male's view of masculinity and body dissatisfaction were not mediated by mental health stigma, as shown in Figure 1, therefore, the null hypothesis was supported. It was determined that mental health stigma did not explain a significant amount of the variance for body dissatisfaction,  $R^2$ = .0017, F(2, 146) = 0.2450, p = .6213 (Kahn, 2014). Bootstrapping procedures were conducted to identify indirect unstandardized effect of the three variables (mental health stigma, masculinity, and body dissatisfaction). A 95% confidence interval was utilized and the intervals ranged from -.0008, .0268 (Kahn, 2014).

Figure 5

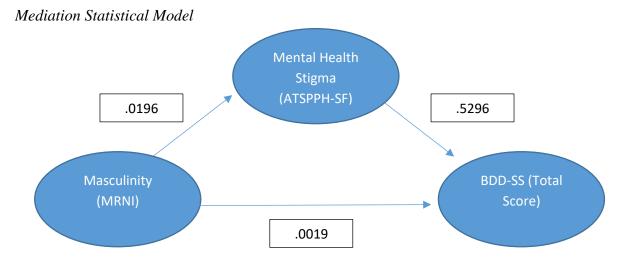


Table 7

H1 Coefficients

	Unstandardized Coefficients		Standar Coeffic	
		Std.		
Model	β	Error	t	Sig.
1 (Constant)	2.0320	2.7709	.7333	.4645
MRNITot	.0019	.0242	.0775	.9383
ATSPPHTot	.5269	.1622	3.2660	.0014

a. Dependent Variable: BDDSSTot

The second research question, to what extent does a person's gender (male or female) moderate the relationship between mental health stigma and BDD-SS total scores? Mental health stigma and gender were entered into the first step of a simple moderation analysis in SPSS (24.0) using the Process macro (Hayes, 2018). The outcome variable for this analysis was the BDD-SS total score with the predictor variable mental health stigma. Gender served as the moderating variable in this analysis. The interaction term between mental health stigma and gender was entered into the second step of the regression analysis. It was determined this did not explain a

significant amount of the variance for body dissatisfaction,  $\Delta R^2 = .0051$ , F(1, 387) = 2.2652, p = .1331 (Kahn, 2014). Figure 6, indicates the conditional effect of the predictor. The conditional effect of mental health stigma (ATSPPH) on body dissatisfaction (BDDSSts) showed the following results.

Figure 6

Statistical Moderation Model: Model Coefficients

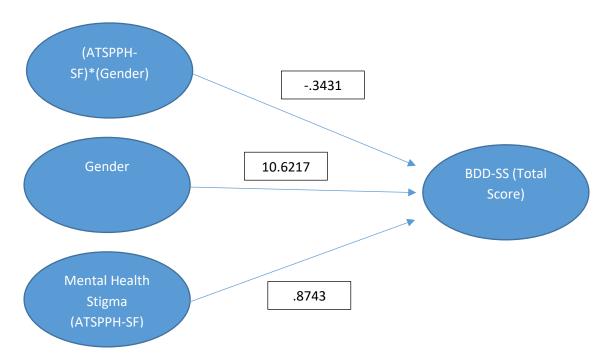


Figure 7

ATSPPHTot with BDDSSTot by Gender

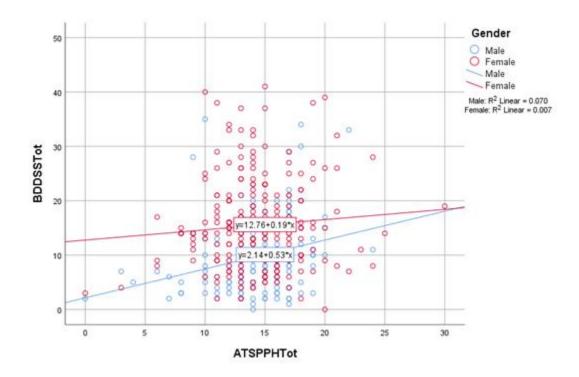


Figure 7 shows the lack of a differential effect of mental health stigma on body dissatisfaction with masculinity at various levels of mental health stigma. With this information it was determined that the null hypothesis was supported for the second research question as masculinity was not found to be a moderator in the relationship between masculinity and body dissatisfaction. The results of the moderated regression model indicated that masculinities correlation between mental health stigma and body dissatisfaction was not dependent upon one's reported adherence to traditional masculinity.

Table 8

H2 Coefficients

		Unstandardized Coefficients		Standa Coeffi	
			Std.		
Mo	odel	β	Error	t	Sig.
1	(Constant)	-8.479	5.7127	-1.484	.1386
	ATSPPHTot	.8742	.3869	2.260	.0244
	Gender	10.6217	3.3608	3.161	.0017
	Moderator	3431	.2279	-1.505	.1331

a. Dependent Variable: BDD-SSTot

The third research question, to what extent does a person's mental health stigma mediate the relationship between masculinity and BDD-SS total scores? A mediated regression model run through Hays' (2018) SPSS macro, Process, was utilized and it was determined that the relationship between masculinity and body dissatisfaction was not mediated by mental health stigma. Due to this finding the null hypothesis was supported. The indirect effect of the variables mental health stigma, masculinity, and body dissatisfaction were measured through bootstrapping procedures were a 95% confidence interval was used. The bootstrap intervals ranged from -.0002 to .0135. (Kahn, 2014). Both predictor variables were significantly correlated with body dissatisfaction in this model, therefore there was no mediation. The correlations between the predictors and the dependent variable indicated that each IV correlated with body dissatisfaction independently but mental health stigma did not strengthen the correlation between masculinity and body dissatisfaction.

Figure 8

Mediation Statistical Model

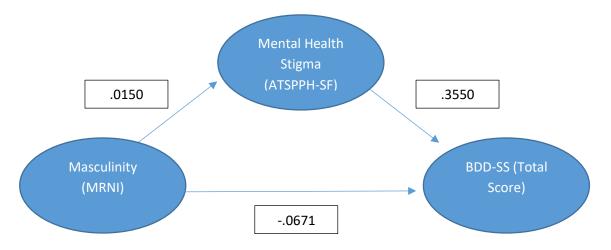


Table 9

Correlation Table

		M	SD	1	2	3
1	BDDSS	13.31	8.232			
2	MRNI	58.83	23.360	175		
3	ATSPPH	14.28	3.512	.132	.132	

Table 10

H3 Model Summary

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.231 <sup>a</sup>	.053	.049	8.029

a. Predictors: (Constant) ATSPPHTot, MRNITot

Table 11

H3 Coefficients

		Unstandardized Coefficients		Standardized Coefficients	
			Std.		
Model		β	Error	t	Sig.
1	(Constant)	12.192	1.896		6.431
	MRNITot	067	.017	191	-3.863
	ATSPPHTot	.355	.116	.151	3.071

a. Dependent Variable: BDDSSTot

The fourth research question, to what extent does a person's feelings about masculinity moderate the relationship between mental health stigma and BDD-SS total scores? Mental health stigma and masculinity were entered into a moderation analysis in SPSS (24.0) using the Process macro (Hayes, 2018). The predictor variable was mental health stigma, while masculinity, measured by the MRNI-SF, served as the moderating variable, and body dissatisfaction served as the outcome variable. The interaction term between mental health stigma and masculinity was entered into the regression analysis. This did not explain a significant amount of the variance for body dissatisfaction,  $\Delta R^2 = .0023$ , F(1, 392) = .9716, p = .3249 (Kahn, 2014). Figure 3, identifies the conditional effect of the predictor. Figure 4 shows the lack of a differential effect of mental health stigma on body dissatisfaction with masculinity at various levels of mental health stigma. After the analysis, it was determined that the null hypothesis was supported for this research question. The results of the moderated regression model indicated that masculinities correlation between mental health stigma and body dissatisfaction were not dependent upon one's reported adherence to traditional masculine beliefs.

Figure 9

Moderation Statistical Model

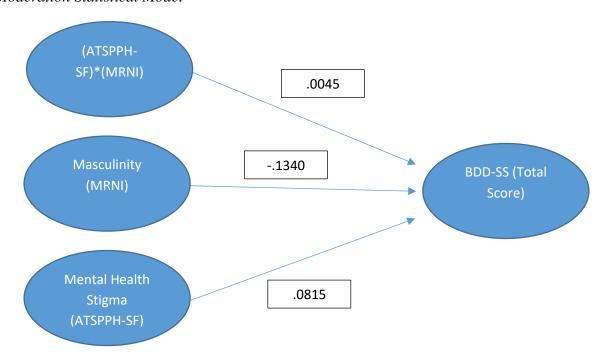


Figure 10

ATSPPHTot with BDDSSTot by MRNITot

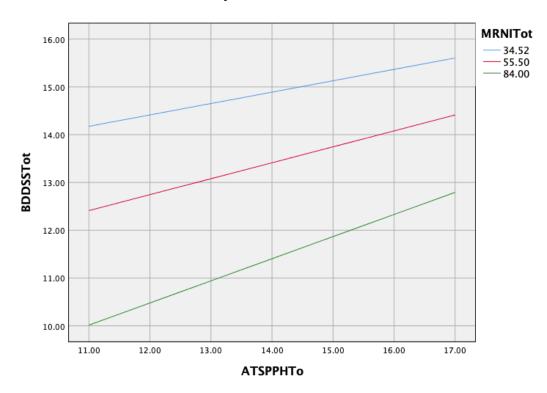


Table 12

Correlation Table

		M	SD	1	2	3	4
1	BDDSS	13.31	8.232				
2	MRNI	58.83	23.360	175			
3	ATSPPH	14.28	3.512	.132	.132		
4	Moderator	.0994	1.07893	.034	.126	.068	

Table 13

H4 Model Summary

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	
1	.236 <sup>a</sup>	.056	.049	8.029	

a. Predictors: (Constant) Moderator, ATSPPHTot, MRNITot

Table 14

H4 Coefficients

	Unstandardized Coefficients		Standardized Coefficients			
			Std.			
Model		β	Error	Beta	t	Sig.
1	(Constant)	12.368	1.904		6.494	.000
	ATSPPHTot	.349	.113	.149	3.011	.003
	MRNITot	069	.018	196	-3.953	.000
	Moderator	.373	.378	.049	.986	.325

a. Dependent Variable: BDD-SSTot

# Chapter V

A MODEL OF MENTAL HEALTH STIGMA AND VIEWS OF MASCULINITY AS CONTRIBUTING FACTORS TO BODY DISSATISFACTION AS MEASURED BY THE BDD-SS

#### **Conclusion**

#### General Overview

This was the first research project to look at the correlation of the predictor variables, mental health stigma and masculinity, on the predictor, body dissatisfaction. Through the examination of the first and third hypotheses, Mental health stigma of males does mediate the relationship between masculinity and BDD-SS total scores & Mental health stigma (all genders) does mediate the relationship between masculinity and BDD-SS total scores, were found to be not statistically significant. Through the regression models it was found the relationship between the MRNI (masculinity) and BDD-SS (body dissatisfaction) were not mediated by stigma towards mental health seeking behaviors. To this point in research it has been identified men do struggle with body dissatisfaction (Dakanalis & Riva, 2013), but little is known as to how masculinity plays a role into male body dissatisfaction (Sturtz-Sreetharan et. al., 2020). Much of the literature published regarding masculinity and body image centered on the idea that men are constantly in competition with one another regarding their physical strength, height, or physique (Drummond, 2002). Similar to the "thin ideal" for women, there seems to be a focus for men to increase their muscularity, which has been perpetuated throughout western media, a "muscular ideal" (Murnen & Karazsia, 2017). Previous researchers have identified that Westernized men

prefer lean body mass, as well as those who contain higher levels of adipose tissue, fatty tissue, are viewed by their peers more negatively than their lean counter parts (Hebl & Turching, 2005).

The second research question, "to what extent does a person's gender moderate the relationship between mental health stigma and BDD-SS total scores?" was not found to be statistically significant. However, when looking at Figure 7, it appears that the interaction between gender and mental health stigma do have some relationship. For those who identify as women, there was not a significant shift in the slope for body dissatisfaction as mental health stigma increased. In contrast, for men, as mental health stigma increase so did the degree of the slope compared to body dissatisfaction. This means as mental health stigma increased, there is a noticeable increase in body dissatisfaction for those who identify as male.

The fourth hypothesis, *Masculinity does moderate the relationship between mental health stigma and BDD-SS total scores*. Addis and Hoffman (2017) reported that, "There is ample evidence that the social construction and learning of hegemonic masculine gender norms is associated with negative perceptions (e.g. stigma) of both depression and help-seeking" (p 172). For many men who are struggling with mental health concerns, it can be difficult to ask for help from others or even acknowledge that help is needed (Addis & Hoffman, 2017). Negative body image can lead to depressive symptoms, anxiety, frustration, and possible somatic symptoms (Phillips, Siniscalchi, & McElroy, 2004; Wylie & Eardley, 2007; American Psychiatric Association, 2013). Tod and Edwards (2015) identified that a hyper focus on a desire for muscularity can lead to a lower quality of life. Depressive symptomatology has been associated with self-reported lower quality of life, and some researchers have identified positive correlation between those who score high on measures of masculinity and measures of depression (Addis & Hoffman, 2017).

Researchers have shown that many men struggle to seek help from mental health clinicians when mental health concerns arise (Addis & Hoffman, 2017). Researchers have identified that men who struggle with gender role conflict are also at a higher risk of developing depressive symptoms (Addis, 2008; Addis & Hoffman, 2017). An issue which Swami (2012) identified was the concept of men's difficulty in seeing depressive concerns within themselves and within other men. Many men who have depression will express anger outwardly rather than allow others to see the emotions most associate with depression (Addis, 2008; Addis & Hoffman, 2017).

When masculinity is looked at through a socio-cultural lens, men learn from their family, peers, and mass media that they must have a specific body type (Smolak, Murnen, & Thompson, 2005; Yeh, Liou, & Chien, 2011; Haas, Pawlow, Pettibone, & Segrist, 2012). Krazsia and Peiper (2011) identified that the language used within a measure is important when looking at the strength of correlations between body satisfaction and masculinity. Measures which use language associated with muscularity showed higher correlations than measures using other language regarding body satisfaction (Krazsia and Peiper, 2011). A significant correlation between masculinity and body satisfaction was corroborated by both the mediator and the moderator models in this study. However, what was not found in this study was that mental health stigma strengthens the correlation between masculinity and reported body dissatisfaction. In conjunction, the relationship between mental health stigma and body dissatisfaction are not dependent on the adherence to traditionally masculine beliefs.

The findings of this study can help psychologist to understand the intricacies of the differing aspects of the development of body dissatisfaction among those who hold traditionally masculine values and their views on mental health stigma. Previous researchers have looked at

these three variables separately (masculinity, mental health stigma, and body dissatisfaction) but none have looked at how the three factors might affect the correlations between the other two. Because there is an intersectionality involved in masculities (Englar-Carlson, Stevens, & Scholz, 2010), there are a multitude of factors which can be considered when a person is examining their own beliefs on what it means to be a man. When working with individuals who identify as male and have body image concerns or advocating for help seeking behaviors for this population, this research can be introduced to better understand the concerns which might be faced.

# **Implications**

# Clinical Implications

Although none of the research questions were determined to be statistically significant, the impact of the findings is still relevant. In the analysis, both models helped to identify that mental health stigma and masculinity predict body dissatisfaction. These findings can help counseling psychologists working with individuals entrenched within cultures having very strong ideals related to traditional masculinity and/or negative views of mental health seeking. These views might exacerbate one's personal beliefs about their body which could lead to further mental health related concerns, just as the authors of the DSM-V (2013) and Grieve and Shacklette (2012) identified the links between negative body image and the increase in mental health symptoms.

# Advocacy Implications

As more research is conducted, further advocacy efforts regarding the demystification of mental health is needed for masculine populations and cultures. As stated, all three of the variables, mental health stigma, masculinity, and body dissatisfaction seem to be rooted within

social construction. Even though there is an understanding that negative body image is associated with the greater cultural lens (Smolak, Murnen, & Thompson, 2005; Yeh, Liou, & Chien, 2011; Haas, Pawlow, Pettibone, & Segrist, 2012) and those who adhere to traditional masculinity might have negative views of those who have depression, much work is needed to begin to break down these barriers (Addis & Hoffman, 2017). This research has the ability to help identify further gaps in literature which can then in turn educate those who are trying to advocate for men's mental health.

# **Research Implications**

Although the null hypothesis was supported for both research questions, there is still valuable information which can be gathered from the current research. Foremost, little research has been conducted looking at possible correlations between masculinity and body dissatisfaction. In addition, there is little known about the association between a negative view on mental health stigma and the development of body dissatisfaction when including masculine beliefs.

A major implication of this study is adding to the limited research regarding men's body image, in comparison to women's body image concerns (Dakanalis et al., 2014; Sturtz-Sreetharan et. al., 2020). The current research will help to facilitate future directives. Looking at men's body image is a newer frontier for social science researchers. Further research could be conducted with differing sampling methodologies to see the impact that the two predictor variables of mental health stigma and masculinity have on the correlations with body dissatisfaction. A larger and more diverse sample might yield different results as the differing constructs could be normally distributed.

## **Summary**

In summary, previous researchers have found correlations between masculinity and body dissatisfaction (Sturtz-Sreetharan et. al., 2020). It is also noted that there has been published research which identified correlation between mental health stigma and masculinity (Addis & Hoffman, 2017). Yet, this was the first look into how these three variables correlated with each other through the use of mediation or moderation. Research within body image and men is a growing field (Sturtz-Sreetharan et. al., 2020). Men's body image, masculinity, and mental health stigma within men are all intertwined. The current research showed correlations between all three constructs: masculinity, mental health stigma, and body dissatisfaction. There is further research needed to identify exactly how these constructs are truly connected. Once we better understand these construct, counseling psychologist can better help their clients and advocate for men's mental health.

#### Limitations

The limitations to this study include generalizability of the sample, sample size, under representation of those who identify as male, and measures regarding masculinity. Although there were steps taken to help create a more generalizable sample size based on region, the predominant portion of the sample (88.4%) live in the West South Central region. Sampling through the use of list servers and social media was utilized intentionally to create a more diverse regional sample. Unfortunately, these attempts did not yield the intended results. This lack of regional diversity might have led to differing cultural feelings towards masculinity and/or mental health.

One reason for the large regional sample could be, in part, due to the use of the College of Education, Health, and Aviation SONA system at a large public university in West South

Central region. This system allows for research studies to become visible to those who are enrolled at the university and therefore more possible exposure to this population. In addition, SONA credit (extra credit for research participation) was earned for those who completed the study through this system.

Although the sample size met the minimum qualifications, a larger sample may help curb the effects faced by violating the normality assumption. In regards to regression, Central Limit Theorem states that as the sample size increases the mean will move closer to the mean of the overall population (Ganti, 2019). Therefore, with a larger sample size the means for the all variables would shift to represent the mean of the overall population.

An area in which this study is limited is the under representation of those who identify as male. Those who identify as male represented only 37.4% of the sample. However, the United States Census Bureau (2020) has reported the percentage of the U.S. population who identify as male as 49.2%. Although the MRNI-SF was normed on men and women (Levant, Hall, & Rankin, 2013), this differentiation between men and those who identify as any other gender limits the generalizability for the information in this study. Although masculinity as a construct effects individuals of all genders (Whorley & Addis, 2006), the information regarding masculinity and body image might have a greater impact if the sample population was representative of the overall gender demographics of the U.S.

One final limitation to this study is also a limitation currently experienced in the area of researching men and masculinity within social science. There are currently differing measures regarding masculinity and the differing constructs therein. However, these current measures of masculinity typically fall within 4 domains: gender role conflict, machismo, male ideologies, and male norms (Griffith, Gunter, & Watkins, 2012). It has been identified that these domains do not

capture the breadth of the male experience. Griffith, Gunter, and Watkins, (2012, p s188) list out 5 areas in which these measures miss out on important aspects of masculinity:

- 1. "developmental or contextual issues
- 2. how masculinity is related to desirable as well as undesirable behaviors
- **3.** how masculinity resides within social, cultural, or structural factors
- **4.** how there is diversity in the relevance of notions of masculinity for men
- 5. allowances for multiple masculine forms or masculinities."

### **Future Research**

Future areas of study could delve further into masculinity as a construct rather than traits associated with traditional gender roles. Much of the current research looks at masculinity as a hegemonic construct developed and looked through a singular lens (Griffith, Gunter, & Watkins, 2012). However, the idea that there is one idea of masculinity is a fallacy which limits the experiences of many due to the lack of insight in regards to cultural intersectionality. Cole (2009) asserts that masculinity is a fluid construct through the life span depending on things such as age, lived experience, and individual characteristics. Griffith, Gunter, and Watkins (2012) go on to explain the complexity of masculinity as, "There is a need to conceptualize masculinity as a structural characteristic and measure it as an individual-level experience that is varied in how it is understood, experienced, and practiced daily" (s187). Some researchers have brought forth different models which help to look at masculinity through the lens of a multitude of subfield of masculinity to identify the dominant masculinities which are present at different points in men's lives (Cole, 2009). Although these theories appear to be an encompassing model to view masculinities, the ability to measure for these subfields seems to be lacking within current social science measures. Further literature and possible creation of differing measures could address how differing cultural identities could influence a person's view of different forms of masculinity. Future research might find significant results for mental health stigma and body

dissatisfaction when using gender as a moderator if there is an increase in statistical power (i.e. increase in the sample size). Additionally, there might be a significant finding if the measures used were more sensitive in nature.

### **APPENDICES**

### Appendix A

### **IRB Approval Letter**



### Oklahoma State University Institutional Review Board

Application Number: ED-19-63

Proposal Title: A Model of Mental Health Stigma and Views of Masculinity as

Contributing Factors to Body Dissatisfaction as Measured by the BDD-

SS

Principal Investigator:

Chris Jayne

Co-Investigator(s):

Faculty Adviser:

Tonya Hammer

Project Coordinator: Research Assistant(s):

Status Recommended by Reviewer(s): Approved

Study Review Level: Exempt Modification Approval Date: 08/14/2019

The modification of the IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46. The original expiration date of the protocol has not changed.

### Modifications Approved:

Modifications Approved: Increase number of participants by 200 for a total of 400 participants

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

- Conduct this study exactly as it has been approved.
- 2. Submit a status report to the IRB when requested
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- Maintain accurate and complete study records for evaluation by the OSU IRB and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

#### Sincerely,

Oklahoma State University IRB 223 Scott Hall, Stillwater, OK 74078

Website: https://irb.okstate.edu/ Ph: 405-744-3377 | Fax: 405-744-4335| Irb@okstate.edu

# Appendix B Informed Consent Statement

### Oklahoma State University

### **CONSENT FORM:**

### OKLAHOMA STATE UNIVERSITY

**PROJECT TITLE:** Stigma and Masculinity as Contributing Factors to the Development of Body Dysmorphic Disorder

### **INVESTIGATORS:**

Christopher Jayne M.S. (Oklahoma State University),

Principal Investigator

Counseling Psychology Doctoral Student

School of Community Health Sciences, Counseling and Counseling Psychology

447 Willard Hall

Stillwater, OK 74078

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Bridget Miller (Oklahoma State University),

Faculty Advisor

Health Education & Promotion Program Director

School of Community Health Sciences, Counseling and Counseling Psychology

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Stillwater, OK 74078

Bridget.miller@okstate.edu

### **PURPOSE:**

The purpose of this study is to shed light on differing components which may lead to body image disturbances and the development of Body Dysmorphic Disorder symptomologies. Through this research, information will be obtained to help understand the manifestation of body image concerns.

### **PROCEDURES**

Participants will be asked a series of questions via an online survey. The survey questions will deal with topics of body image, masculinity, and mental health stigma. The survey will take approximately 30-45 minutes.

### **RISKS OF PARTICIPATION:**

There is a small chance that participants may experience distress when thinking about their own experiences with body image, masculinity, or the stigma that persist with mental health. These thoughts may have a negative impact on the participant's current self-esteem. If you experience any trauma as a result of this study please contact any of the following: OSU Tulsa Counseling Center at 918-594-8568, OSU Counseling Center at 405-744-5472, and OSU Counseling and Counseling Psychology Clinic at (405) 744-6980.

### **BENEFITS OF PARTICIPATION:**

Benefit for participants could be gained insight into their perceptions of their own body satisfaction. Participants also may gain further insight into how family life may have affected their perceptions of their body. Results also will help to further literature regarding body satisfaction and the development of body image concerns.

### **CONFIDENTIALITY:**

All scores collected during this research will be maintained in a password-protected database accessible only by research staff (no personal student information that would identify the student will be present). If, as a result of this research, a public presentation were created such as a journal publication or conference presentation, no individual information will be presented. The demographic form will not contain participant names, nor will any individual identifying information be collected on participants. All data will be stored in a locked file cabinet within the office of one of the principal investigators. Research records will be stored securely for 5 years and only researchers and individuals responsible for research oversight will have access to the records. All records will be destroyed at the end of this period of time.

### **COMPENSATION:**

Participants who complete the survey via the SONA system will be awarded credit for their time.

### **CONTACTS**:

You may contact the lead researcher at the following addresses and phone numbers, should you desire to discuss your participation in the study and/or request information about the results of the study: Christopher N. Jayne M.Ed., MS., College of Education, Health, and Aviation Oklahoma State University, 74078, chris.jayne@okstate.edu.

### **PARTICIPANT RIGHTS:**

I understand that my participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time, without penalty.

### **CONSENT DOCUMENTATION:**

I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and of the benefits of my participation. I also understand the following statements:

I affirm that I am 18 years of age or older.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form will be given to me. I hereby give permission for my participation in this study.

### **Participants Consent**

By selecting "YES" and completing this sa	urvey I consent to my participation in this research.
Yes	
No	

# Appendix C

# **Demographics Questionnaire**

### **Demographic Qs**

1. What is your primary race or ethnic identification? (Select one)
<b>0</b> =Black/African American
1=Hispanic/Latino
2=White, not of Hispanic origin
3=Asian/Pacific Islander
4=American Indian/Alaskan
5=Another Race/Ethnicity
98=Refuse to Answer
2. What is the highest level of education you have completed? (Select one)
<b>0</b> =No formal education
<b>0</b> =No formal education <b>1</b> =Did not graduate from High School
1=Did not graduate from High School
1=Did not graduate from High School 2=High school graduate or GED
1=Did not graduate from High School 2=High school graduate or GED 3=Some college/AA degree/technical school training
1=Did not graduate from High School 2=High school graduate or GED 3=Some college/AA degree/technical school training 4=College graduate (BA/BS)
1=Did not graduate from High School  2=High school graduate or GED  3=Some college/AA degree/technical school training  4=College graduate (BA/BS)  5=Some graduate school

3. What Gender do You Identify With: (Select one)

1=Male
<b>2</b> =Female
3=Transgender (Male to Female)
4=Transgender (Female to Male)
5=Gender Non-Conforming
4. During the last 12 months, what was your total personal income from all sources? (Select one.)
<b>1</b> =\$10,000 or less
<b>2</b> =\$10,001 to \$20,000
<b>3</b> =\$20,001 to \$40,000
<b>4</b> =\$40,001 to \$60,000
<b>5</b> =\$60,001 to \$80,000
<b>6</b> =Over \$80,000
5.Describe your relationship status (Select one).
1=Single/Never Married
2=In a committed relationship (not married and not living together)
3=In a domestic partnership (living with a committed partner)
4=Married
5=Separated
<b>6</b> =Divorced
7=Widowed
8=Non-Monosexual

# 6.Do you now identify as: (Select one.) **1**=Heterosexual **2**=**G**ay **3**=Bisexual **4**=Lesbian **5**=Queer **6**=Asexual **7**=Pansexual 8=Omnisexual 7. Which region of the United States of America do you reside: (Select one.) **1**=New England (CT, ME, MA, NH, RI, VT) 2=Middle Atlantic (NY, NJ, PA) 3=East North Central (IL, IN, MI, OH, WI) 4=West North Central (IA, KS, MN, NE, MO, ND, SD) 5=South Atlantic (DE, FL, GA, MD, NC, SC, VA, DC, WV) **6**=East South Central (AL, KY, MS, TN)

7=West South Central (AR, LA, OK, TX)

8=Pacific (AL, CA, HI, OR, WA)

8=Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)

### Appendix D

### **Male Norm Roles Inventory**

Strongly Disagree	Disagree	Slightly Disagree	No Opinion	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

- 1. Homosexuals should never marry.
- 2. The President of the US should always be a man.
- 3. Men should be the leader in any group.
- 4. Men should watch football games instead of soap operas.
- 5. All homosexual bars should be closed down.
- 6. Men should have home improvement skills.
- 7. Men should be able to fix most things around the house.
- 8. A man should prefer watching action movies to reading romantic novels.
- 9. Men should always like to have sex.
- 10. Boys should prefer to play with trucks rather than dolls.
- 11. A man should not turn down sex.
- 12. A man should always be the boss.
- 13. Homosexuals should never kiss in public.
- 14. A man should know how to repair his car if it should break down.
- 15. A man should never admit when others hurt his feelings.
- 16. Men should be detached in emotionally charged situations.
- 17. It is important for a man to take risks, even if he might get hurt.
- 18. A man should always be ready for sex.
- 19. When the going gets tough, men should get tough.

- 20. I think a young man should try to be physically tough, even if he's not big.
- 21. Men should not be too quick to tell others that they care about them.

# Appendix E

# BDD SYMPTOM SCALE (BDD-SS)

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0	0	appearance Obtaining cosmetic surgery.										
0		sing medicat	ions o		7	_				t defect	ts (e.g.,	skin,
	~	Using medications or topical treatments to correct defects (e.g., skin, baldness).										
0	0			A	Applyi	ing se	elf-su	rger	<b>y.</b>			
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0 0		Touchin	ig or f	eelin	ıg bod	ly pai	rts.					

Column 1												
Yes No												
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0 0	Mentally reviewing past events, conversations, and actions to find out how people reacted to my appearance.											
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0 0	Comparing my appearance to others' appearance (in person, in pictures or in the media).											
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	LE: If you chech of these sympton	•	•	•	-					-	se mar	k the overall
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Yes	No											
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0	0			- -	- Tann	ing.						
0	0			Cor	mbin	g hair	•					
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0	0				Shavi	ing.						
0	0		(	Char	nging	cloth	es.					
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0	(sexual activity, hugging, kissing, dancing, talking closely).  Avoiding physical activities like exercise or recreation													
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0	0	Hid	Hiding appearance (with make up, clothing, hairstyles, jewelry, hats, hands, or body position).											
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0	0	I think that other	rs are	stari	ng at	or ta	lking	abo	out me	2.				
0	0	I think that other			diffe defec		y beca	aus	e of m	y				
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0	0	If my appearance is defective, I will end up alone and isolated.												
0	0	If my appearance is defective, I am helpless.												
$\circ$	$\circ$	No one can like me as long as I look the way I do.												
0	0	If my appearance is defective, I am unlovable.												
0	0	I must look perfect.												
0	0	I look defective or abnormal.												
0	0	I am an unattractive person.												
0	0	What I look like is an important part of who I am.												
0	0	Outward appearance is a sign of the inner person.												
0	0	No one els			_			-						
0	0	If I could look j	•	_						l				
$\sim$	0	_		happ	ier.									
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0	0	If I learn to accept		lf, I'l	l lose			_		ok				
		: If you checked 'yes' f hese symptoms during	-	•	ptom					-	e mark	the overall		
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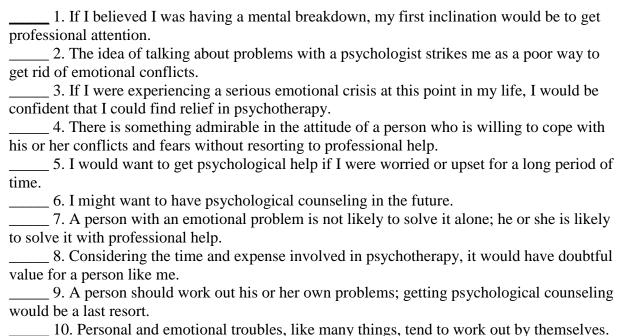
### Appendix F

### **ATSPPH-SF SCALE**

### **Instructions**

Read each statement carefully and indicate your degree of agreement using the scale below. In responding, please be completely candid.

0 = Disagree 1 = Partly disagree 2 = Partly agree 3 = Agree



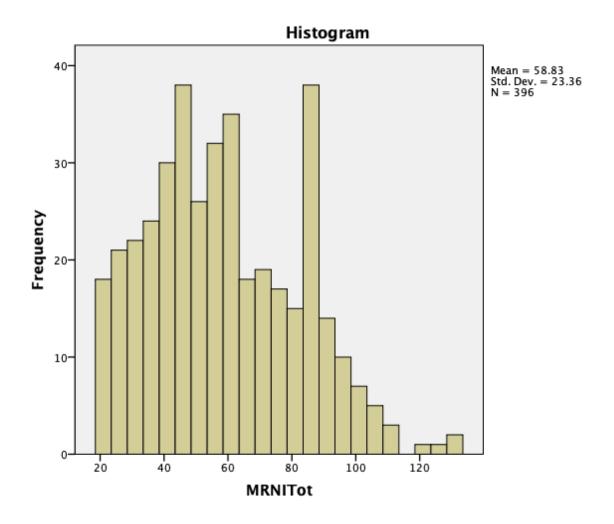
### **Scoring**

Reverse score items 2, 4, 8, 9, and 10, then add up the ratings to get a sum. Higher scores indicate more positive attitudes towards seeking professional help. Calculate a mean for males, for females, and for each of the ethnic groups to examine group differences. Discuss any observed similarities and/or differences between the groups with the class. [Adapted from Whittlesey, V. (2001). *Diversity activities for psychology*. Boston: Allyn and Bacon, and Fischer, E., and Farina, A. (1995). Attitudes toward seeking psychological professional help: A shortened form and considerations for research. *Journal of College Student Development*, 36, 368-373.]

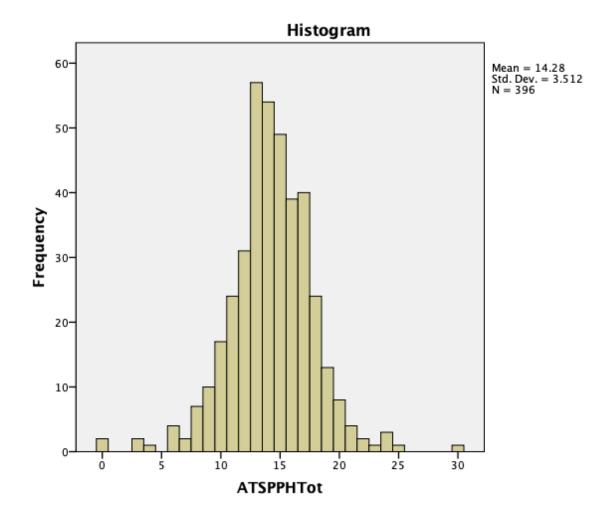
# Appendix G

# Histograms

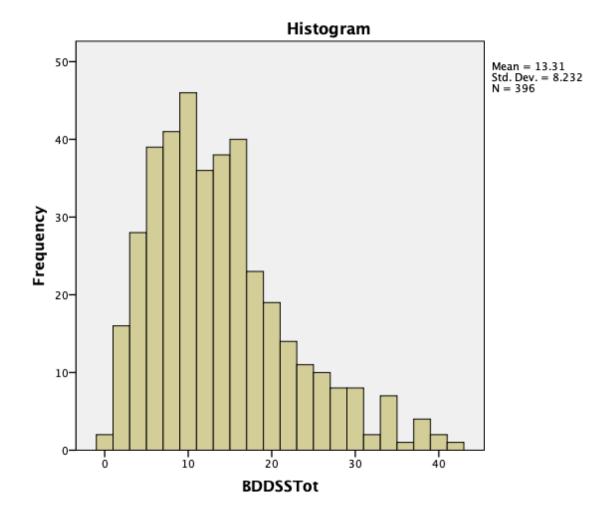
### MRNI: Left Skew



# ATSPPH: Leptokurtic



### BDDSS: Left Skewed



### References

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#### **VITA**

### Christopher Neal Jayne

### Candidate for the Degree of

### Doctor of Philosophy

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