

Union College Union | Digital Works

Honors Theses

Student Work


6-2017

Macho Men: Male Body Image in 21st Century America

Allison N. Michaelis

Union College - Schenectady, NY

Follow this and additional works at: <https://digitalworks.union.edu/theses>

 Part of the [Other Feminist, Gender, and Sexuality Studies Commons](#), and the [Social Psychology Commons](#)

Recommended Citation

Michaelis, Allison N., "Macho Men: Male Body Image in 21st Century America" (2017). *Honors Theses*. 61.
<https://digitalworks.union.edu/theses/61>

This Open Access is brought to you for free and open access by the Student Work at Union | Digital Works. It has been accepted for inclusion in Honors Theses by an authorized administrator of Union | Digital Works. For more information, please contact digitalworks@union.edu.

Macho Men: Male Body Image in 21st Century America

By

Allison Michaelis

Senior Thesis

Submitted in partial fulfillment
of the requirements for
Honors in the Department of Sociology

UNION COLLEGE

Schenectady, New York

March, 2017

ABSTRACT

MICHAELIS, ALLISON Macho Men: Male Body Image in 21st Century America.

Department of Sociology, March 2017.

ADVISOR: Melinda Goldner

There is a myriad of research on women's body image, and discourse on this subject has become virtually normal; however, research on male body image is sparse, and is not openly discussed. The current study looks at factors that influence men's body image and body image pathology, such as body distortion, steroid use, eating disorders and depression. Prior literature has identified gender, sexuality, race, and media exposure as key factors that influence men's perceptions and behaviors. This study found partial support that these factors play a role in men's body image. Specifically, gender, media images of the ideal men's body, and peer influence impacted men's patterns of perceptions, behaviors, and treatment. There was an overall perception among respondents that men should be muscular, which was influenced by peer groups. This masculine ideal can lead to other behaviors, such as dietary supplement use, as well as eating disorders and body dysmorphic disorder. Yet, these negative behaviors are difficult to address when men are reluctant to seek treatment because doing so would violate masculine ideals. Based on these findings, more federal regulation and warning labels on dietary supplements is needed, as well as awareness among the general public. Regulating dietary supplements would acknowledge the danger they pose, and putting warning labels on them would provide awareness of potential risk factors that may influence men's decision to consume them. When the general public is educated on the body image pathology that men face, then perhaps the stigma that surrounds male body

image and the overall cultural value for men's stoicism where men must not be anything less than "macho" would be minimized.

ACKNOWLEDGEMENTS

To Professor Goldner, for encouraging me to channel my thesis project towards one that desperately needs attention. Thank you for consistently guiding me on my senior thesis project; this project would not have been possible without your help. Thank you Professor Grigsby for four years of wonderful academic advising, and for agreeing to participate in my oral defense. To Professor Stablein, for introducing me to the discipline through my first Sociology course at Union, which influenced my decision to become a Sociology major. I am grateful for Professor Cotter for teaching me about quantitative research methods, which helped me analyze my quantitative methods in my thesis. To Professor Matsue, for inspiring me to conduct my thesis project on a gender-related issue. I would also like to thank Bruce Connolly, for helping me find the most relevant literature on the topic. I appreciate the support of the Union College Sociology Department, and the incredible professors within the discipline. Finally, I would like to thank my friends and family who supported me through this process.

TABLE OF CONTENTS

| | |
|--|-----------|
| Abstract | ii |
| Acknowledgements | iii |
| Preface | i |
| Chapter 1: Literature Review..... | 1 |
| 1.1.Introduction | 1 |
| 1.2 Sexuality | 3 |
| 1.3 Gender | 7 |
| 1.4 Race..... | 9 |
| 1.5 Media | 11 |
| 1.6 Body Distortion | 13 |
| 1.7 Eating Disorders | 14 |
| 1.8 Depression | 16 |
| 1.9 Steroids | 17 |
| Chapter 2: Methods..... | 21 |
| 2.1 Sampling Population..... | 21 |
| 2.2 Description of the Interview | 22 |
| 2.3 Data Analysis..... | 22 |
| Chapter 3: Qualitative and Quantitative Results | 23 |
| 3.1 Qualitative..... | 23 |
| 3.2 Demographics | 24 |
| 3.3 Perceptions | 25 |
| 3.4 Behaviors | 28 |
| 3.5 Treatment | 33 |
| 3.6 Quantitative | 35 |
| 3.7 Demographics | 36 |
| 3.8 Social and Athletic Organizations | 37 |
| 3.9 Living Condition/Relationship..... | 39 |
| 3.10 Gender and Sexual Orientation | 40 |
| 3.11 Body Perceptions | 41 |
| 3.12 Behaviors | 42 |
| 3.13 Mental Health: Symptoms and Diagnosis..... | 50 |
| 3.14 Health Education and Counseling..... | 54 |
| Chapter 4: Discussion and Conclusion | 58 |
| 4.1 Gender..... | 59 |
| 4.2 Sexuality | 59 |
| 4.3 Body Perceptions | 60 |
| 4.4 Peer Influence | 62 |
| 4.5 Supplement Use | 63 |
| 4.6 Eating Disorders and Body Dysmorphic Disorder | 65 |
| 4.7 Conclusion | 66 |
| 4.8 Implications | 68 |
| 4.9 Limitations | 70 |
| 1. References | 72 |

| | |
|---------------------|----|
| 2. Appendix A | 76 |
| 3. Appendix B | 77 |

Preface

Every day we look in the mirror before we face the public. Oftentimes after going to the gym, we weigh ourselves to see if our hard work has paid off. We scrutinize other people's bodies in advertisements and social media, and evaluate how ours compares. How frequently individuals engage in these behaviors varies, but at what point do they become a clinical disorder? I have listened to women discuss their desire to achieve beauty ideals. I have observed men engage in appearance behavior in some form or another, though they do not openly discuss it. As a result of my everyday encounters with these gender differences, I have decided to write my senior thesis on men's body image in the United States. The transition to college is noted as one of the most stressful time in people's lives. During this time, people are at high risk for developing eating disorders.

Chapter One: Literature Review

In this literature review, I explored how men's sexuality, gender, race, and media exposure impact their body image. Sexuality was found to be an important predictor of eating behaviors and disorders. Interestingly, gay men who struggle with body image dissatisfaction were more likely to report greater negative outcomes. This included internalized homophobia, expectations of stigma from others for being gay, and victimization in an antigay physical attack. Other studies found that gay men experience more body dissatisfaction than heterosexual men. While this research highlighted the correlation between media images and men's drive for muscularity and thinness, I would like to further examine how the media as well as peer and family influence affect men differently. In the next chapter, I will discuss the qualitative interviewing process utilized that further investigates such questions.

a. Introduction

While the original Superman and Batman were depicted as slender, the modern day super heroes appear far more muscular reflecting a cultural shift of the ideal male body. As a matter of fact, compared to the last 30 to 45 years, men's bodies today are portrayed as much more muscular in a variety of media outlets including magazines, cartoons, Hollywood, and action toys (Heid 2017). Through these unrealistic media images, men have become less satisfied with their bodies. In fact, recent studies have suggested that American men are just as likely as women to experience body dissatisfaction. One study suggested that adolescent boys dissatisfied with their bodies might be more self-critical and experience more distress than adolescent girls. Other studies have shown that this dissatisfaction is further exacerbated after playing video games with extremely muscular characters. Unfortunately, muscularity is

often times symbolic of one's masculinity, which has had a variety of implications on men's overall health.

Until World War II, male attractiveness was measured by behavior and achievements. The aftermath of World War II showed that these ideals would persist. The American male was to provide for his family, succeed at his job, and display physical strength. Men were not indifferent to their bodies, but those who overly emphasized his physical appearance would be accused of vanity (Luciano: 2002). Even though by mid-century, obesity among Americans was at alarming rates, men did not begin dieting despite the high risk America faced for heart disease (Luciano: 2002). While exercise was considered masculine, as it was associated with action, it was not strenuous. Yet, the second-wave feminism reshaped how women perceived the male body. If men provided economic resources, their looks were of secondary importance. Men's role was no longer breadwinner, as it came to be a role shared by women. As women came to hold more power, men's was undermined. In turn, women started to have their own demands for their potential male partners, and men's bodies became more important. However, men's body image issues are still not given enough attention.

Today, disorders are very widespread and destigmatized by the incredible amounts of publicity that surround them. For women, these disorders have become virtually normal. As a matter of fact, they are thought to be issues faced predominantly by women. On the other hand, society has conditioned men to keep quiet about the issues they face. For this very reason, the research on men's experiences with their bodies is sparse, and attention is needed desperately. In this literature review, I explore how body image varies among sexuality, race, and media exposure in relation to psychological outcomes of negative body image including eating disorders, depression and body distortion.

b. Sexuality

From the time they are born, boys and girls undergo a process of socialization. This influences how they associate social expectations, attitudes, and behaviors with gender from adolescence into adulthood. Body dissatisfaction is often thought to be an issue faced predominantly by the female population. While some studies support that women experience more body dissatisfaction than men, other studies have recently provided evidence of growing problems of body image issues and related disorders in men.

Until recently, dialogue about men's body images centered on heterosexual male bodies. While advertising and network television stations primarily emphasize heterosexual men's bodies, gay men's bodies are not far from scrutiny. In fact, evidence in research literature suggests that gay men are more susceptible to body image concerns than heterosexual men. Oftentimes, gay men believe they must look heterosexual to conform to Western culture (Drummond: 2005). Yet, these gay men must also conform to cultural norms of the gay world. Studies have shown that sexual minority men, including gay and bisexual men, experience more body dissatisfaction than heterosexual men.

Some studies have looked at the effect of objectification on eating disordered behavior. Engeln-Maddox, Miller and Doyle (2011) investigated whether sexual objectification theory related to body surveillance, body shame, and eating disordered behavior (Engeln-Maddox et al. 2011). The objectification theory suggests that sexual minority men experience increased pressure to attain the ideal body, which is lean and muscular, as they seek out men as sexual partners. This study found that heterosexual males scored lower for sexual objectification than all of the other three groups; however, heterosexual women and gay men scored higher for body surveillance than both heterosexual men and lesbian women. Heterosexual women

and gay men also scored higher than heterosexual men and lesbian women on eating disordered behavior. Lesbian women's eating disorder behavior scores did not greatly differ from heterosexual men. Objectification theory was supported among heterosexual women as sexual objectification indicated body surveillance, body surveillance indicated body shame, and body shame indicated eating disordered behavior. As such, the correlation between sexual objectification and body shame was mediated by body surveillance, and the correlation between body surveillance and eating disordered behavior was mediated by body shame. For gay men, body surveillance indicated body shame, which indicated eating disordered behavior. One critique of this study is that there was not equal representation of all sexual orientations. ⁱ

Other research examines the link between homophobia and body image dissatisfaction. For example, Kimmel and Mahalik (2005) attempted to determine whether the minority stress model would explain gay male body image concerns. Scholars suspect that gay men who internalize homophobic attitudes and have greater expectations to be stigmatized for being gay, may seek a more powerful physique to protect against prejudice. This may lead to the development of a negative body image because of their internalized self-shame. In addition, being a victim of an antigay attack may contribute to an increased desire for a more powerful physique, in order to feel safer and more powerful against future antigay attacks. As such, experiences of this minority stress may make gay men more vulnerable to body image concerns. The study also looked at whether the minority stress model should include gay men's conformity to masculine norms as a factor of mental health concerns among gay men.

The findings revealed that gay men who reported more body image dissatisfaction were more likely to report greater internalized homophobia, expectations of stigma from others for being gay, and victimization in an antigay physical attack. For masculine body ideal distress (MBIDS) scores, gay men were more likely to report distress from failing to achieve an ideal masculine body under certain criteria: if they were younger, reported higher internalized homophobia, had higher expectations of stigma for being gay, had been a victim of an antigay physical attack, and conformed more to traditional masculine norms. Overall, results from this study showed that all three-minority stress factors (internalized homophobia, stigma and an antigay physical attack) were associated with body image dissatisfaction and masculine body ideal distress. Such findings support previous research that explains lesbian, gay and bisexual individuals' mental health problems as a result of minority stress. Unfortunately, the sample did not include bisexual men and was mainly white gay men, which limited the ability to generalize findings.ⁱⁱ

Association with the gay community increased vulnerability to body dissatisfaction in gay men in a study by Beren, Hayden, Wilfley, and Girlo (1995). While they were not significantly farther from their body ideal, gay men were significantly more dissatisfied with their bodies. Gay men were also more distressed in various psychosocial measures related to body dissatisfaction. Such measures assessed experience of childhood teasing, awareness of the self in the presence of others, anxiety in the presence of others, and peer and family pressure to lose weight. Notably, gay men reported similar levels of distress to both heterosexual and lesbian women in each of the psychosocial areas, except that gay men reported more general appearance and weight-specific childhood teasing. One explanation that the authors suggest is that as young boys, gay men feel physically different than their

peers, which may be a more distressing experience for boys than for girls, “boys may be socialized to play and fight more psychically than girls” (Beren, Hayden, Wilfley, and Girlo 1995: 140). Lower self-esteem was associated with body dissatisfaction in gay men; however, lesbians and heterosexual women did not differ in these measures. Thus, association with the gay community increased vulnerability to body dissatisfaction in gay men, while association with the lesbian community was irrelevant to body dissatisfaction in lesbians. The study did not identify subjects by age, body mass index, and education level, which could have influenced the reported findings.ⁱⁱⁱ

Similarly, gay men experience more body dissatisfaction than heterosexual men according to Kaminski, Chapman, Haynes, and Own (2005). Even though gay men in the sample weighed less and had a lower BMI than heterosexual men, they still valued a lighter ideal weight. They were more dissatisfied with their bodies than heterosexual men, despite not being any more likely to be heavier than their ideal weight. Still, the results on MEBBIE scales revealed that gay men were more preoccupied with becoming fat, less satisfied with their physique overall, more concerned with muscular development, and more likely to have distorted perceptions about the importance of a good physique. In opposition to the hypothesis, gay men were not more likely to compulsively exercise, but they reported more use of restrictive dieting practices. This suggests that gay men are not solely concerned with body weight, but also the makeup and appearance of their bodies.

Some researchers examined variation in eating disorders by sexual orientation. Feldman and Meyer (2007) determined the prevalence of any type of eating disorder was not significantly different between heterosexual women, lesbians and bisexual women, and there

were no differences between LGB women and men. However, gay and bisexual men had a higher prevalence of eating disorders than heterosexual men.

c. Gender

Research has shown that men and women with a conflicted gender identity experience more disordered eating. Having a conflicted gender identity means that an individual feels as though the sex and gender assigned to them at birth do not align with their gender identity. Accordingly, Aglars, Santtila, and Sandnabba (2010) revealed that both male and female participants with a conflicted gender identity were more dissatisfied with their bodies than others. Women with a conflicted identity had higher levels of disordered eating than female controls. However, men with a conflicted gender identity did not score higher levels of disordered eating compared to male controls. While gender-conflicted women who had female-female sexual encounters revealed lower levels of body dissatisfaction than gender-conflicted women, there was no difference in terms of levels of disordered eating. Gender-conflicted men who reported having had male-male sexual relations were less likely to consider themselves too thin, more fearful of being overweight, and more preoccupied with food than gender-conflicted men who had not had such encounters. Yet, they were more likely to consider themselves too short and more likely to dislike parts of their bodies than those who had not had male-male sexual experiences. On the composite variable measuring disordered eating, gender conflicted men who had male-male sexual encounters scored higher than those who had not and they also showed more self-induced vomiting.^{iv}

The drive for muscularity predicts eating disorders in men and women differently. Pritchard (2014) determined there were no differences in gender in the correlation between bulimic symptoms and overweight preoccupation, self-classified weight category, appearance

evaluation, or appearance orientation. They only found a correlation between the drive for muscularity and bulimic symptomology, which was much greater in men than in women.

There Gender differences in bulimic symptoms may vary according to age, thus hindering the generalizability of this study because only traditional college aged males were studied.

Participants over the age of 25 were eliminated from the study.^v

Gender differences are apparent in the frequency of steroid intake in college aged body builders. Weightlifting does not result in contentment with one's body. Bodybuilders tend to set higher goals for themselves. Peters and Phelps (2001) exhibited that there is a gender difference between male and female bodybuilders in body image distortion. While male participants showed no body image distortion, female participants perceived themselves as less muscular than the objective outside raters, such as fitness center employees (Peters and Phelps: 2001). Yet overall, body image dissatisfaction existed in both female and male bodybuilders. Steroid use/non-use did not significantly impact body image dissatisfaction or body image distortion. A critique of this study is that the figure rating scales could have included more silhouettes at a higher degree of the muscular end of the scale. This is due to the fact that some of the male steroid using bodybuilders rated their current and ideal figure as the same silhouette, which was the largest figure. However, if a silhouette that had more muscle mass was added, then there may have been more differences among the images that male steroid-using body builders selected.^{vi}

Men and women differ in the body parts they most critically evaluate. McCabe, Butler, and Watt (2007) focused on the chest, waist, hips, and thighs to predict the discrepancy between the perceived actual body size, ideal body size, and media ideal sizes in adult men and women. The ideal body size was between the actual and the perceived media ideal. They

determined that all women overestimated the size of their body parts (McCabe, Butler, Watt 2007). Women believed that the media ideal was smaller than their own ideal and perceived actual size. Men did not accurately perceive their body size and overestimated all parts except the hips. In contrast to women, men's ideal size of their body parts was greater than their actual size for all body parts except their hips.

d. Race

Members of visible ethnic and racial minorities often face stigma and discrimination based on unique, physical characteristics of group membership. They also experience social devaluation of their phenotypes (Oney, Cole, and Sellers: 2011). These experiences further challenge ethnic and racial minorities to maintain a healthy sense of self in Western culture, where they are often viewed as deviant from the body ideal.

Many members of ethnic and racial minorities may develop attitudes about their bodies and their social groups to protect their self-esteem in light of this societal threat. Oney, Cole, and Sellers (2011) explored whether various dimensions of racial identity and gender moderated the relationship between body dissatisfaction and self-esteem for African American men and women. The findings revealed that for African American college students; individuals who view race as central to their identities are more likely to report high self-esteem, regardless of whether they experience body dissatisfaction. Conversely, respondents who were high in body dissatisfaction were more likely to report lower self-esteem if race was not considered central to their identities. Private regard, which means positive feelings about a racial group, moderated the relationship between body dissatisfaction and self-esteem for men and women. Individuals who were high in private regard and low in body dissatisfaction had the highest self-esteem scores. African Americans

with the highest self-esteem were satisfied with their physical appearance and positively viewed their racial group. On the other hand, for participants high in public regard, which refers to positive feelings others have about a racial group, self-esteem was unrelated to body dissatisfaction. Yet, participants who reported high body dissatisfaction and low public regard reported lower self-esteem. African Americans who perceived the most negative evaluations by out-group members experienced lower self-esteem.^{vii}

The perception of weight-related health risks as well as self-esteem varies across racial groups. Storek and Dunham's study (2012) concluded that exposure to advertisements of ideal women's bodies can produce self-enhancing effects on men because of the high desirability of the women in the ads, also called "The Fantasy Effect." Viewing an advertisement of women of high desirability can increase self-esteem if men engage in an explicit or implicit fantasy of being with the woman. Implicit self-esteem refers to an individual's evaluation of oneself in an unconscious manner, while explicit self-esteem, refers to an individual's evaluation of oneself in a conscious manner. Exposure to images of thin women increased Asian and Hispanic men's implicit self-esteem. This was not found in White American men. Such findings implied that implicit measures examine more short-term effects on self-esteem than explicit measures. Implicit self-esteem is unconscious, while explicit self-esteem is conscious and may take longer to internalize.

In addition, there were differences in men's perception of weight-related health risks across racial and ethnic groups. White men identified the narrowest range of body sizes free from health risks, such as anorexia, obesity or diabetes, while Asian and Hispanic men identified a wider range of body sizes. This may be because Asian and Hispanic individuals are not as educated on health risks associated with a heavier body weight, or because of a

cultural difference of what is considered the ideal male body type. However, while men's ideal body types did not vary across race and ethnicity, perception on body weight related to health risks is a part of measuring one's ideal body size, and thus this finding was inconsistent.

Feldman and Meyer (2007) found that Latino and black lesbian, gay, and bisexual (LGB) men and women had a high prevalence of eating disorders, such as subclinical bulimia and any subclinical eating disorder. There also were no differences across gender or racial groups.

e. Media

The effects of media images on women's perceptions of their bodies are well documented. Studies have shown how powerful images found in fashion magazines and other media outlets influence women's satisfaction with their bodies (Duggan and McCreary: 2004). This has had tremendously negative outcomes for many women, causing eating disorders such as anorexia and bulimia (Duggan and McCreary: 2004). In Western society today, men are also obsessed with the imperfections of their bodies. Advertisements on dieting, fitness programs, hair-growth remedies, and products for improving sexual performance highlight their physical insecurities. Such advertisements convey the message that men need to constantly improve their appearance.

Some research examines the relationship between media exposure and body dissatisfaction. Media influence predicted body dissatisfaction in women in a study by Green and Pritchard (2003), but not men. The authors note that this may be because of the population sample – perhaps college males highly consume the media whereas adults do not, affecting the level of influence of the media on older men. Thus, participants' ages ranged

from 19 to 68 years old, with a mean age of 42 years. As a disadvantage to the study, the authors assessed body image and media influence on a 5-point scale. However, this quantitative approach narrows the information that respondents can provide about their experience with body image. Participants may not be able to accurately quantify their perceptions about media influences or their body image but attempt to do so for the purpose of the study.^{viii}

Some studies have found that media use correlates with men's drive for muscularity and thinness. Pritchard and Cramblitt (2014) found that the drive for thinness was correlated with body comparison and internalization of general media images in men. Drive for thinness also correlated with societal pressure to attain the perfect body. Yet, increased exposure to media ideals did not increase men's drive for muscularity.^{ix}

Duggan and McCreary (2004) examine pornography exposure as well as exposure to muscle and fitness magazines. The results of this study reveal the correlation between increased exposure to magazines and decreased body satisfaction for all men, but gay men reported poorer eating attitudes and a stronger desire to be thin than heterosexual men (Duggan and McCreary 2004). Additionally, over 26% of gay men in the sample reported being on a diet, while none of the heterosexual men sampled reported this information.^x

More specifically, other research explores the effect of viewing male versus female models in the media on men's perceptions of their ideal and actual body sizes. Skorek and Dunham (2012) determined that men who viewed male models in advertisements reported a lower discrepancy between their actual and ideal body size than men who viewed female models. This may be because men can directly compare their bodies to those of male models, whereas the female body is innately different. A potential limitation of the study is the use of

self-reported measures of self-esteem, as participants do not always give truthful answers (if their true answers are socially undesirable).^{xi}

Media influences individuals' perception of particular body parts. McCabe, Butler, and Watt (2007) found the difference between the actual body size and men's media ideal size for all body parts except thighs were determined by their exposure to the media. This finding reveals that exposure to the media, particularly on muscles, impacted men's perception of their internalization of media messages about their ideal body sizes. Exposure to media emphasizing weight loss determined perceived media ideal for hips, which reveals that men may believe the ideal body created by the media demands a more muscular chest and narrow hips. The researchers utilized the chest, waist, hips, and thighs in order to determine discrepancies with actual body size. This is limiting since perhaps participants had other body parts that influenced their body perceptions.^{xii}

f. Body Distortion

Body image is comprised of multiple components, including perceptions, attitudes, feelings and behaviors about one's body. One component of body image is body image distortion. Body image distortions the extent to which an individual has a distorted perception towards his or her objective appearance (Blashill and Wilhelm: 2014). Distorted perception of body image plays a vital role in the pathogenesis of eating disorders such as anorexia nervosa and bulimia.

Kneipp, Kelly, and Wise (2011) found that females had significantly more distorted body image than males. Impaired self-reference, which occurs when one's concept of self is negatively altered which can be a result of chronic trauma, was the best predictor for females. For males, the best predictors were anger and irritability and avoidance. Yet, not all of the

participants in this study were trauma survivors, given that the participants were college students. Thus, there may be other more significant variables that explain body image distortion.^{xiii}

Prior research has acknowledged a negative correlation between body size overestimation and self-esteem. The study, “Body Size Distortion and Self-Esteem in Asymptomatic, Normal Weight Males and Females,” assessed body size distortion and the relationship between self-esteem and distortion in normal weight, asymptomatic males and females. Females’ self-esteem was lower than males (Thompson and Thompson 1986). The findings revealed that on a global measure of distortion, all subjects overestimated their body sizes. Yet, when compared with males, females more significantly overestimated their body sizes. Females had lower self-esteem than males. The global distortion score for women was strongly negatively correlated with self-esteem, showing that a higher distortion was linked to a lower self-esteem. There was no significant correlation between global BDI and self-esteem for men. Women overestimated their body size to a larger degree than males.^{xiv}

g. Eating Disorders

Even though research on men with bulimia nervosa is sparse, this is influenced by the perception that eating disorders only affect women and gay men. Recently, studies have suggested that the number of men suffering from bulimia nervosa may be more significant than previously believed.

Bulimic symptomology can be linked to appearance perceptions and the degree of body image investment. Bulimic symptoms, body image investment, and body image evaluation in American undergraduate students was examined by Pritchard (2014). Men and women who rated higher on bulimic symptomology, rated themselves lower on their

perceptions of their appearance. Such participants were more likely to identify themselves as overweight. In addition, men and women who scored higher on bulimic symptomology reported more pathological levels of two of the measures of body image investment, appearance orientation and overweight preoccupation. Bulimic symptoms were positively associated with the drive for muscularity in men, but not in women.^{xv}

Other studies have revealed that gay and heterosexual men's attitudes and behaviors towards eating, exercise and body image can predict eating disorders. Kaminski, Chapman, Haynes, and Own (2005) found that gay men exhibited a higher degree of general body dissatisfaction, which made them likely to experience poor body image and related eating disorders when compared to heterosexual men. Yet both groups had insignificant degrees of bulimic symptomatology. The significant incidence of restrictive dieting practices among the sample of gay men is likely linked to their worries about gaining body fat. Neither group reported significant problems with emotional eating. Lastly, in contrast with the hypothesis, there were not significant differences on the Over Exercise Scale. A drawback of the study is the small sample size. Future research could include a sample of both clinical and non-clinical populations to address issues such as compulsive exercise.^{xvi}

Another study investigated the relationship between subclinical eating disorders in the gay community. Feldman and Meyer (2007) found that gay men had a greater prevalence of lifetime full syndrome bulimia, subclinical bulimia, and any subclinical eating disorder, when compared with heterosexual men. Age mattered, as respondents aged 18-29 were more likely to have subclinical bulimia compared with those aged 30-59. Yet, respondents who participated in a gay recreational organization or group had a much higher prevalence of subclinical eating disorders including anorexia, bulimia, and binge eating disorder, compared

with nonparticipants. However, this was inconsistent with other respondents who participated in different outside organizations; respondents who were gym members did not have different results from members who were not gym members, regardless of whether the gym had a primarily gay membership. To the study's disadvantage, the researchers utilized nonprobability sampling, which may result in an overrepresentation or underrepresentation of certain groups. ^{xvii}

1.1. Depression

There is evidence that body dissatisfaction can have depressive outcomes. Blashill, Tomassilli, Biello, O'Cleirigh, Safren, and Mayer (2016) found that body dissatisfaction significantly predicted elevated depressive symptoms during the first office visit, which the researchers call "Wave 1." This also predicted a .21 increase in depressive symptoms at Wave 2 (Blashill et al. 2016) Body dissatisfaction at Wave 1, as well as lower self-efficacy at Wave 2. Thus, the results revealed that higher levels of body dissatisfaction are correlated with increased depressive symptoms, sexual anxiety, and poorer sexual self-efficacy. Unfortunately, body dissatisfaction was only measured during the first evaluation, at Wave 1. As a result, bi-directional relationships between body dissatisfaction and the outcome variables were unable to be measured. Perhaps body dissatisfaction not only predicts depression, but depression predicts body dissatisfaction, but the inverse was not tested. Additionally, the researchers could have included a group of heterosexual males in order to compare them with the gay and bisexual subjects. ^{xviii}

Body image distortions are prevalent among males, and in addition, are linked to dysfunctional outcomes. Yet, research on risk factors of depression among men is sparse. Blashill and Wilhelm (2014) assessed the relationship between body image distortion and

depressive symptoms among adolescent boys into their adulthood (Blashill and Wilhelm: 2014). The results indicated that boys who were average weight and viewed themselves as either underweight or overweight reported higher levels of depressive symptoms than boys who accurately viewed their weight as average. Thus, such findings determined that distortions in body image are risk factors for elevated depressive symptoms among adolescent boys, which continue into early adulthood. However, there was a lack of investigation on body image dissatisfaction in this study. While body image and body image dissatisfaction are related, they are distinguishable. Research has shown that body image dissatisfaction among adolescent boys is predictive of elevated depression. Thus, this study could more accurately depict risk factors of depression among men. ^{xix}

1.2. Steroids

Bodybuilding competitors, children's action toys, and even male models have become more muscular since the 1960s (Pope, Khalsa, and Bhasin: 2017). The last several decades have shown a change in the idealized male body in terms of muscularity. As a consequence of these trends, muscularity has become a particular concern for young men. Men have resorted to the use of anabolic-androgenic steroids both to improve their appearance and performance.

There is a western cultural preference for men with muscular bodies. The media is flooded by ideal images of youthful, lean, and muscular men. One response to the tremendous pressure men face to be more muscular is the practice of bodybuilding. The study, "Body Dissatisfaction and Body Image Distortion in Men Who Train with Weights," investigated the incidence and correlation of body dissatisfaction and body image distortion in a sample of men who train with weights. The results revealed that the men exercised an

average of 4.1 sessions per week, and the most highly ranked motive for training with weights was to build muscle. The least important motive was to lose weight. The majority of men chose the two most highly mesomorphic shapes for desired somatype, while the rest chose shapes that represented their own physique. In general, participants underestimated their muscularity, and desired to have a more mesomorphic body shape. The majority of men felt uncomfortable exposing their body at the beach or public pool at least occasionally. Overall, dissatisfaction with body shape negatively affected self-esteem. While only men who train with weights were included in this sample, it would be important to compare men who train with weights with men who engage in endurance training. Thus, the methods utilized in this study could be extended to such groups to broaden the study of body dissatisfaction and body distortion in men who frequently work out at the gym. ^{xx}

Anabolic-androgenic steroids are muscle-building supplements that are similar to male sex hormones (Beaver, Vaughn, DeLisi, and Wright: 2008) Dr. Harrison Pope, director of the Biological Psychiatry Laboratory at McLean Hospital in Massachusetts, noted that more young men today are struggling with muscle dysmorphia and as many as 4 million Americans, almost all of whom are male, have used anabolic-androgenic steroids at some point in their lives in a JAMA article (Pope, Khalsa, and Bhasin 2017). Before the 1980s, these steroids were restricted to elite athletes, yet since that time has become more common among the general population. In fact, today most users of this steroid are not competitive athletes but nonathletic weightlifters who use it to improve their appearance: become leaner and more muscular. A large population uses significant amounts of over the counter dietary supplements that are intended to enhance performance and appearance; yet the sale of these supplements is mostly unregulated. Such products have been found to contain illegal

anabolic-androgenic steroids. Anabolic steroids pose many dangers, such as premature death and neurobehavioral disturbances. Literature has suggested that long-term use can cause cardio myopathy, which can lead to heart attack or stroke. Yet, the phenomenon is recent and more evidence on heart risks associated with steroid use is needed.

Another study by Beaver, Vaughn, DeLisi, and Wright (2008) showed the effects of anabolic-androgenic steroid use on violent behavior. The authors note that while such steroid use has been centered on professional athletes, national surveys reflect that adolescents and young adults of the general population also use these supplements (Beaver, Vaughn, DeLisi, and Wright 2008). Physical changes that result from anabolic-androgenic steroid use are well documented; yet emotional effects of this supplement are not. They found that young adult males who used androgenic steroids reported partaking in more severe violent behaviors, than those who did not use steroids. Generally, 2.6% of males had used anabolic androgenic steroids once in their life, while 2.3% had used them in the previous year. Since the prevalence rates were significantly lower for females, only males were analyzed. Thus, the results of this study indicate that the use of anabolic androgenic steroids can lead to severe violent behaviors. One limitation of this study is anabolic-androgenic steroid use was measured through self-reports, rather than on direct measures.^{xxi}

The association between body image and steroid use has been documented. Kanayama, Barry, Hudson, and Pope (2016) expanded on previous research that suggests body image pathology is associated with use of anabolic-androgenic steroids. The authors compared current and past anabolic-androgenic steroid users to explore short-term and long-term users. Nonusers were also examined. Overall, anabolic-androgenic steroid users reflected only slight differences from nonusers on most measures. Muscle dysmorphia may

mean that that they do not show their bodies in public, and sacrificed activities because of these body-appearance concerns. The short- term anabolic-androgenic steroids “experimenters” also showed differences from nonusers. The long-term steroid users showed the most significant differences from nonusers on a variety of measures, such as symptoms of muscle dysmorphia and greater endorsement of conventional male rules. Thus, body-image pathology and stereotype views of masculinity are present among men with long-term anabolic-androgenic steroid use. One limitation of this study is that it was cross-sectional, and thus, whether these factors cause or sustain anabolic-androgenic steroid use is impossible without further testing in longitudinal studies.^{xxii}

Chapter Two: Methodology

The purpose of the study is to explore men's experiences with their bodies within American society today. There is a myriad of research on women's body image, and discourse on this subject has become virtually normal. This is in part due to the socialization that occurs during adolescence. Starting from a young age, girls are socialized to vocalize the emotional issues they encounter. Continuing into adulthood, women are encouraged to speak out about their appearance-related struggles as they fail to match the unrealistic ideal female body that floods the mainstream media. Female body image is openly discussed. In fact, eating disorders have become culturally accepted as a characteristically "female" issue. Though there have not been as many opportunities for men to seek treatment or speak out about such issues, men are dissatisfied with their bodies as much as women, according to some studies. Yet research on the phenomenon of male body image is sparse. This study attempts to gain understanding of the body issues faced uniquely by men. Moreover, it examines whether gender, sexuality, race, family, peers and media exposure impact men's body perceptions.

2.1 Sampling Population

Upon receiving permission from the Human Subjects Review Committee, I contacted practitioners and administrative staff to interview them about their views on men's body image and direct experiences with men. The first set of interviews included two individuals who treat and educate male college students, as well as two staff members who interact with male athletes. The second set included administrative staff from two national organizations. Participants were found through online websites and snowball sampling. The interviews were

approached in a conversational manner. While a structured list of questions was used, I asked follow-up questions when more information was needed. All information was kept confidential and their participation was voluntary. While the sample population was small, respondents included experts in the field who provided detailed information on the subject.

2.2 Description of the Interview

Participants were asked to recall information on men they or their organization have worked with. If they were practitioners, for example, they were asked about their patient's demographic characteristics, motivation for seeking treatment, exercise and dietary patterns, and incidence of eating disorders. Respondents were asked a series of questions about the ideal male body, including whether they believed that peers or family members teased these men about their weight, weight loss or body image.

2.3 Data Analysis

In addition, archival data were used as an additional resource to solidify research findings. The American College Health Association collects institutional data on specific colleges regarding eating behaviors, mental health issues, exercise regimens, etc. The Director of the Counseling Center at a college gave permission to use the data from students, as well as national data from colleges across the United States. The dataset was beneficial for this study since face-to-face interviews with male college students were unfeasible because of the personal nature of questions asked. The results from these reports provide numerical results on personal issues and daily habits related to male students' body image. While the interviewing process focused on practitioners' perspectives on men's media usage and peer and family influence, the numerical data attempt to gain insight on male student's own experiences with their overall health and behavior.

Chapter Three: Qualitative and Quantitative Results

The qualitative data provide in-depth information on the demographics, perceptions, behaviors, and treatment patterns of men, based on experts who work directly with male students, and those who work with national organizations. The quantitative results offer a variety of broader information on demographics, social and athletic organizations, living condition, and relationship status. Additionally, they exhibit data about men's body perception, nutrition, exercise, drug use, academics as well as mental health, and health education and counseling. While the qualitative interviews provided professionals information about personal experiences with eating disorders and related issues among male students and patients alike, the quantitative results offer data over a variety of different areas at the institutional and national levels.

3.1 Qualitative

After conducting interviews with six participants, a myriad of qualitative results were gathered that further explain the phenomenon of male body image. The analysis highlights their insights on perception, behaviors, and treatment as it relates to body image concerns and related health behaviors among young men. Overall, the findings delineate the differences between athletes and non-athletes among the male college age population, which reflects diverse patterns in their body ideals, supplement use, and overall motivation to seek treatment. Ultimately, the lack of discourse on this gender specific phenomenon is set in place by society's masculine ideas, and it is exemplified through these interviews. As men attempt to maintain their masculine identities, they often experience body dissatisfaction, and sometimes experience more serious body image problems such as eating disorders and body dysmorphic disorder. However, finding male-oriented treatment programs or even a safe

place for men to speak out about these issues is rare. Ultimately, while male patients may not meet all of the criteria for a diagnosis of anorexia nervosa, they often obsess over their appearance and diet.

3.2 Demographics

Many respondents emphasized that female students are their main audience. One staff member of a national organization expressed that they receive calls from primarily women, which is not to say that women are more affected by body image related issues than men. Instead, there is a stigma surrounding men's voices on the topic of body image issues and eating disorder pathology, according to this respondent. The representative from another national organization said that 45-50% of their patients are males. Upon questioning about any relevant demographic patterns, such as age, race or family income among their students, one college staff member noted that outreach and education referrals on body image and eating disorders vary across the board, while the disciplinary referrals, which mandate health education, are predominantly non-Hispanic white students. While eating disorders affect people of all ages, genders, socioeconomic status, and ethnicities, the national staff recognized that the male callers with eating disorders are most often between ages of eighteen and twenty-one. Finally, one respondent noted an increased emphasis of body image concerns among sexual minorities. For instance, they said that men who are gay or transgender are often overly concerned with their bodies.

3.3 Perceptions

Respondents stressed that the ideal body image for men is lean and muscular. They noted that males who endorse this ideal are not necessarily attempting to be thinner, but rather trying to gain muscle mainly through exercise. In particular, respondents noted that men want large shoulders, strong arms, and a small waist, as well as strong glutes and thighs.

The provider, accounting for differences in ideal bodies in men's sexuality, compared the ideal body of gay male patients who strive for a more "feminine" physique than heterosexual male patients, but noted that depends on the individual, and varies across sports.

For instance:

Soccer players want to have really big quads. Basketball players it is more upper body strength and also calves that they want to build leaping ability and that is not necessarily disordered but how they get a part of their body stronger from weight training and working out and fueling it properly. Hockey players want to be big but lean.

Similarly, two other respondents said male athletes want to be "big, ripped, and lean," but disagreed as to the stigma of being perceived as too "skinny."

When asked where men typically hear or see messages about the ideal body, there was some disagreement. Two respondents identified the media as the primary source, especially television, advertising, and according to the provider, unreliable websites and blogs offering inaccurate information. Yet, another said that while the media is the main source of messages for women's ideals, there is a lack of media messages about ideal body sent to men:

The male population is very different. I don't think that the media puts that pressure on guys as they do on girls. There tends to be 'you can do anything' as a guy and generally be pretty good with body image. It doesn't seem like there is a stigma of being too fat or too thin with guys, but the media puts a very specific type for girls. It seems to be that it is a double standard in what is talked about.

There was more agreement on the influence of friends, especially in formal groups (e.g., athletic teams, fraternities, etc.). For example, one emphasized the effect of friends' conversations on food, the newest diet, and overall weight in peer settings. A staff member from a national organization said that, "Occasionally, there will be shaming in the peer group, especially in high school where there is teasing around body weight or body shape," and especially between age eight to fifteen, often for being "pudgy," "doughy," or "soft." Peers may tease one another for being heavier, but it is because of a lack of muscle, particularly in the abdominal area, according to one respondent. On the other hand, one noted that men of a smaller body frame are targeted by their friends: "If you are 150 pounds or under [your friends] will be like 'dude, eat a sandwich.'"

Some noted that athletes often joke with each other about their weight. In fact, even when teammates are considered in shape, their friends will direct negative commentary towards them. One respondent gave a scenario that they often noticed: a teammate says to another teammate, who was within a normal body weight but had just gained five pounds, "Oh big tough guy, you gained five pounds." Elaborating on this challenge, the respondent said:

There is always a back and forth. It is hard to do things right with a group of guys around you. As an athlete, I think they are just messing with each other. If you are friends in general, you are going to make fun of them because you are giving them a hard time. Maybe it is an athletic thing. And it is all in good fun.

Ultimately, regardless of whether they need to lose or gain weight, or are in an acceptable weight range, all teammates are equally teased about their bodies. For the group of men who do not need to gain or lose weight, the teasing did not appear to be harmful, but one respondent said, "If you are in that 90% who has no issues it ends up being funny which I

guess is a terrible way to say it;” however, the top 5% who needs to gain or the bottom 5% who needs to lose weight might experience this teasing in a negative way. These two groups are supported in various ways. For example, younger team members are paired with older team members who also have to do the same moderations to their bodies, or have done them in the past. This allows the older team members to gain a leadership role, while the younger teammates are provided with guidance as they work on making alterations to their bodies.

When asked about weight-related teasing among families, respondents believed that this occurs less frequently than teasing among peers; however, it can have a dramatic impact when it does occur. Teasing by family members, particularly parents, begins when a boy is young, and therapy is needed to recover from such early teasing, according to the provider.

One patient’s situation is a common scenario:

Two sisters [who] have a body type like [their] dad, which is tall and thin, and she [the patient] was born with a body type more like [her] mom, which is a shorter and stockier frame. He is on her all the time and she developed an eating disorder.

This is a common scenario for both males and females where their body frame does not align with their parents’ expectations. The negative term, “string bean,” is targeted towards thinner men, while “chubby” is used if the person needs to lose weight, according to a respondent.

One respondent affiliated with a national organization said that they have patients whose fathers are strict on their sons for being slightly overweight, which often leads to self-doubt.

Respondents pointed out a specific group that is often targeted among both families and peers - college-age men who are late developers, who are oftentimes shorter and still going through puberty. Along with being a target for related teasing, boys who develop at a later age than most men are also at a higher risk for body dysmorphic Disorder.

These influences can affect men positively or negatively. One respondent noted that they had never encountered a male student who spoke about his body or about having a negative self-image. While another said that while a lot of men are self-driven to work on their bodies, most of their motivation is because of the attention they receive from their peers and coaches, which is what “keep them fueling the fire.” They elaborated, “Once they get that physique and attention for having that physique, they don’t want to lose [it].” As they work to improve their bodies, they do so because they want to improve their appearance - their health is not a concern. One staff member said, “I’d like to tell you that it’s all health but it’s not. I think if a girl tells them they look good, and their teammates and coach tell them they look good, they will continue [on] that path.” When asked whether athletes have more body-related issues than the general male population, the representative from a national organization stated that athletics can be both protective and a risk factor for such body image issues. They acknowledged that this experience depends on the type of sport and how the coaches respond to body-related issues.

3.4 Behaviors

Respondents addressed particular patterns of weight loss, weight gain, use of dieting supplements, excessive exercising and dieting, as well as related disorders.

While one respondent believed that weight loss and weight gain was a minimal concern among their male students, most respondents believed otherwise. However, the respondent who believed these topics are of minimal concern believed that weight loss and weight gain come into play among male students when alcohol use is taken into account. Other respondents agreed that weight loss and weight gain are important, regardless of alcohol intake. The health professional acknowledged that men who are trying to lose weight are

focused on the number represented by the scale, whereas men who are trying to gain weight are more focused on their appearance and specific body measurements. For instance, the patients who are attempting to gain weight, specifically muscle mass, may attempt to determine the size of their triceps with a tape measure. The national staff members acknowledged that while binge-eating disorders are very common in males, eating disorders in men are more concerned with building muscle, where they want to bulk up rather than slim down. There can be concern about weight for athletes, though. One of the national staff members said that there can be a concern for athletes in sports where one has to meet a certain weight category, such as in wrestling, gymnastics, and dance. The respondents who interact with athletes agreed that this varies by sport.

The provider acknowledged the extensive use of dieting supplements among their patients, particularly protein powder, explaining that while for some people (such as strict vegetarians or vegans) protein powder is helpful, for others too much protein can be dangerous. Having large amounts of protein can put a strain on one's kidneys and cause bone loss. They acknowledged the health risk of supplements, especially when they are taken without the supervision of a health professional:

There are some supplements proven to be beneficial but they really have to be done under the guidance of a dietician. But most of what they need they can get from food. Protein powder is the biggest rip off [...] supplements are not regulated by the FDA so there can be contaminants because they are not considered drugs.

Another potentially dangerous dieting supplement is fat burning pills. The respondents from national organizations also identified laxatives, diet supplements, and steroids as supplements utilized by their male callers. One stated, "I have seen a lot of kids going to the GNC or whatever and getting creatine or muscle building powders, trying to increase the amount of protein in their diet." The health professional mentioned their patients' obsession with diet,

especially for building muscle. This is often accomplished through the consumption of supplements.

Athletes, in particular, have to be very careful about supplements because they are disqualified from competition if they test positive for banned substances. Thus, the provider emphasized the media's effect on athletes, specifically that the media endorses supplement use without acknowledging the danger they impose. Understanding the risks of dieting supplements, one respondent endorses a whole food diet for athletes. Accordingly, when athletes need to lose weight, they give them a longer period of time so that they have time to modify their bodies, rather than resort to a crash diet or diet supplements. Also, the provider acknowledged that staff members give athletes a list of banned supplements to promote compliance. This may not be a direct treatment, but at the very least, provides awareness to athletes of which substances are banned, and therefore dangerous.

While some respondents emphasized male patterns of over-exercising, other respondents concentrated on excessive dieting. These answers were split; half of respondents believed their patients over-exercised, while the other half believed that they engage in excessive dieting. Two respondents said that men focus on exercise rather than diet restraint. Another respondent who works with male athletes acknowledged that though they often exercise too much, this behavior only becomes an issue when they are fatigued and getting injuries, such as muscle pulls or strains, or non-contact injuries. Two other respondents highlighted men's dieting behaviors. In particular, one respondent described issues with refueling after exercise, which results in the breakdown of lean mass. They stated, "They think all they need is protein and really low carbohydrate diets, which doesn't work. They are usually on some eating regimen." Another staff member that interacts with male athletes

explained that if the male athletes are ever able to attain ideal body size, then they will struggle to maintain it, especially when they achieved this size through some restricted regimen. Thus, respondents highlighted either patients' struggles with over-exercising or proper nutrition.

All respondents believed that there is a correlation between social media use, and anxiety and depression among their students. One respondent emphasized that social media especially puts pressure on students to glamorize their lives a certain way. They said that, "You only put your proudest posts on twitter or Facebook." Another respondent that works with athletes addressed that social media is often used among them to negatively post about their team members. They stated about the correlation between media use and anxiety and depression:

I think it is a big deal. If there is a tweet out there that is negative towards somebody it does take its toll. It's hard to pretend that everything doesn't matter when you are eighteen to twenty-two and somebody thinks you stink or you are weak and you're on a team.

Another respondent stressed that eating disorders are often comorbid with other mental health disorders, such as anxiety and depression, stating that, "The media doesn't cause an eating disorder but it is definitely shown to influence body image and, in turn, influence an eating disorder." One respondent from a national organization added that visual media is more powerful than written words in affecting men's mental health. They identified social media, magazines, television, and advertising as relevant to the relationship between media and anxiety and depression, and eating pathology.

Many respondents noted that their male patients' common diagnoses include body dysmorphic disorder (BDD), which is not classified as an eating disorder in the DSM-5, but rather a subcategory of OCD. A respondent said that after meeting with patients for sports

nutrition, they often find a subgroup that has body image issues and BDD, which most of their patients suffer from rather than an eating disorder. They stated that while the majority of male patients with BDD want to gain muscle weight, the other 10% of their patients that have BDD want to lose weight. Those that want to gain weight for muscle believe that they “can never be big enough.” Most of their patients with BDD are building their body and becoming “ripped,” which oftentimes is in attempt to be “masculine.” This respondent acknowledged that there are other cases, such as a patient with BDD who perceives himself as overweight, although he is not.

Other respondents addressed that most male patients suffer from eating disorders, rather than BDD. One respondent stated that 10% of their male patients suffer from an eating disorder, though the majority of their patients consult with them to improve their nutrition or to lose or gain weight without having an eating disorder diagnosis. Yet, most respondents stated many of their patients have been diagnosed with an eating disorder. For instance, one respondent mentioned that about 30% to 40% of their patients suffer from an eating disorder, such as anorexia or bulimia. Moreover, other respondents emphasized binge eating disorder (BED), as a common diagnosis among male patients even though the male population may be underrepresented. One respondent from a national organization stressed that binge eating is an issue that a lot of men face and is under-diagnosed. “It may not be recognized because nobody thinks to ask about it or to look for it.” On the contrary, one respondent was unaware of any male athletes with an eating disorder. They acknowledged, “If they don’t talk about it you can’t really know.” Ultimately, this respondent highlights the lack of dialogue regarding male eating disorders.

3.5 Treatment

When asked about their patients' motivations for seeking treatment, a health educator said that the students that voluntarily participate in outreach and education programs do so because they have self-identified the impairment that results from their behaviors. A respondent from a national organization expressed that a lot of people seek treatment because their current habits are not sustainable. They emphasized that the majority of patients seek treatment as a last resort and to alleviate emotional distress.

Reasons for seeking treatment are distinguished between athletes and non-athletes. One respondent said that athletes are motivated to improve their body for performance rather than appearance; non-athletes more often wish to improve their physique. They emphasized their male-athlete patients desire to be "ripped," rather than change their body for their performance on the field.

The health professional emphasizes the individualistic nature of treatment, saying that a healthy body is different for all individuals:

You can't go by BMIs. If you treat your body well most of the time and allow yourself to enjoy the food you might enjoy in moderation, your body will magically go to the place it is supposed to be and stay there so you don't have to obsess. I call it a place but you don't have to call it a 5-pound range. Eat well and exercise and your body will get there. We have too much stuff out there telling us we are doing it wrong.

Ultimately, in counseling sessions, the health professional advocates for this set point and tries to get through to their patients that nutrition and body image is not about the number on the scale. However, it does mean avoiding unhealthy diets, such as those with large amounts of protein and little to no carbohydrates, or diets with protein powders, unless an individual is unable to obtain protein through food.

Ultimately, men struggle to seek treatment because of the stigma that surrounds men with body image issues and eating disorders that are currently considered predominantly female diagnoses. National organizations focus on de-stigmatization and recognition that men have eating disorders and body image issues as well as women. As one respondent said, “Men want a certain kind of recognition that both men and women get this problem. It is not a man getting a female problem, it is a man getting a problem that affects both men and women.” Both respondents from national organizations address the inequality in treatment programs, which are typically designed for women. They acknowledged that there must be treatment centers that are oriented towards *both* men and women since, “Men do not want to be a patient at a treatment center for women, they want to be at a treatment center that works with men and women.” Ultimately, there needs to be a change in discourse on the subject so that men are not ashamed to seek treatment.

3.6 Quantitative

This quantitative portion of the analysis includes surveys from the American College Health Association-National College Assessment (ACHA-NCHA-II), data from a college sample, and the Center for Collegiate Mental Health (CCMH) from the years 2012, 2014, and 2016. The ACHA-NCHA-II is data from a college sample, while the CCMH report describes college students receiving mental health services, not the general student population. ACHA-NCHA-II and CCMH data provide an array of information on individuals including academic status, sexual orientation, health education, nutrition, and exercise regimen. The tables below include combined data from the ACHA-NCHA-II and CCMH surveys, making note of the difference in questions between these surveys. In addition, some tables include the institutional data from the years 2016, 2014, and 2012, yet oftentimes only information on the year 2016 at the institutional level is provided based on the information available. In addition, several of the tables solely include the institutional report, not combined with the national, since some questions included in this particular survey were not present in the national surveys. Furthermore, it is important to take note of the younger age range of male respondents from the institutional survey, and the older age range of male respondents from the national survey. The goal of the study is to explore different factors that influence men's behavior, perception, and treatment in regards to their body weight and shape. By comparing the statistics these surveys provide, I was able to carefully examine the overarching patterns that exist among male respondents.

3.7 Demographics

The demographic patterns of college male respondents were important in bringing awareness to their age, race, and self-identity. Overall, most respondents from the institutional data report were between the ages of twenty and twenty-one. Most respondents identified as Caucasian in both samples.

Age as a variable is considerably significant for identifying the demographics of respondents. The range was between eighteen and twenty-four years old for the institutional report, but most respondents were twenty and twenty-one years old.

The majority of respondents in the institutional 2016 report were white, 85%, and the fewest respondents were “other” at 2% and Hispanic or Latino/a at 3%. None of the respondents were American Indian or Alaskan. Most respondents in the 2016 national data were white, being 69.9%, and the fewest respondents were Native Hawaiian or Pacific Islander at .2%. The pattern held for 2014 and 2012 national data.

Table 1: Age: How old are you?

| | <u>2016 College Sample</u> |
|----|----------------------------|
| 18 | 13% (n=8) |
| 19 | 18% (n=11) |
| 20 | 23% (n=14) |
| 21 | 23%(n=14) |
| 22 | 18%(n=11) |
| 23 | 2%(n=1) |
| 24 | 2%(n=1) |

*Ages 25-31 were taken out, since 0% of respondents fell within these age ranges.

Table 2: Race: How do you usually describe yourself?

| | 2016 College Sample | 2016 National (n=37,409) | 2014 National (n=30,749) | 2012 National |
|--|------------------------|-----------------------------|-----------------------------|------------------|
| White | 85% (n=51) | 69.9% | 71.2% | 73.1% (n=594) |
| Black or African American | 7% (n=4) | 7.8% | 8% | 9.7% (n=79) |
| Hispanic or Latino/a | 3% (n=2) | 7.9% | 7.1% | 6.2% (n=50) |
| Asian or Pacific Islander | 10%(n=6) | | | |
| American Indian or Alaskan | 0%(n=0) | 0.4% | 0.3% | 0.4% (n=3) |
| Biracial or Multi racial | 5%(n=3) | 4.4% | 4.2% | 2.3% (n=19) |
| Other | 2%(n=1) | N/A | N/A | 1.0% (n=8) |
| Asian American/Asian | | 7.3% | 6.9% | 6.6% (n=54) |
| Native Hawaiian or Pacific Islander | | 0.2% | 0.2% | 0.2% (n=2) |
| Self-Identity | | 2.1% | 2.1% | |
| Prefer not to answer | | | n=4 | 0.5% |

*National survey asks for race/ethnicity.

3.8 Social and Athletic Organizations

Engagement in social and athletic organizations is of particular interest. Most respondents were not members of a fraternity, yet this may be due to the survey's small sample, or the nature of individuals willing to participate. The majority of male respondents in the 2016 institutional report, 67%, were not fraternity members; while 33% of male respondents were fraternity members. A critical variable is athletic participation, since particular sports teams involve specific exercise and eating regimens as well as peer and coach influences that vary among teams. Most respondents from the institutional survey did not participate in a college sports team at the varsity and club level, but most did at the intramural level. On the other hand, less than 10% of respondents from the national survey

participated in sports at the varsity level, but they only asked about varsity participation by asking, “Do you participate on an athletic team that competes with other colleges or universities?” The majority of respondents from the 2016 institutional data, 74%, have not participated in organized college athletics at the varsity level. In addition, most respondents, 64%, have not participated in club sports. On the other hand, most respondents, 58%, have participated in intermural college athletics. However, the national survey asks for current athletic team participation, while the institutional survey asks for past athletic participation, specifically within the past twelve months. Still, more respondents from the institutional survey had participated in an athletic team at the college level than from the national survey.

Table 3: Social Organizations: Are you a member of a fraternity?

| | <u>2016 College Sample</u> |
|-----|----------------------------|
| No | 67% (n=40) |
| Yes | 33% (n=20) |

Table 4: Athletics: In the past 12 months, have you participated in organized college athletics at any of the following

| | <u>2016 College Sample</u> | <u>2016 National</u> | <u>2014 National</u> | <u>2012 National</u> |
|-------------|----------------------------|----------------------|----------------------|----------------------|
| Varsity | | | | |
| No | 74% (n=43) | N/A | N/A | N/A |
| Yes | 26% (n=15) | | | |
| Club sports | | | | |
| No | 64% (n=38) | N/A | N/A | N/A |
| Yes | 36% (n=21) | | | |
| Intramurals | | | | |
| No | 42% (n=25) | N/A | N/A | N/A |
| Yes | 58% (n=34) | | | |
| No | | 91.4% | 91.6% | 91.1% |
| Yes | | 8.6% | 8.4 % | 8.9% |

*The National Survey asked, “Do you participate on an athletic team that competes with other colleges or universities?”

3.9 Living Condition/Relationship

The living condition and relationship status of male respondents were also critical variables in the survey that further addressed respondents' lifestyle. Most respondents from the institutional report live in a campus residence hall; on the other hand, most respondents from the national survey live in an off-campus house or apartment.

The next variable was relationship status, which can similarly affect respondents' environment and thus, behavior. The majority of male respondents from the 2016 institutional survey, 70%, reported not being in a relationship, while the fewest, 5%, reported being in a relationship and living with his significant other. The 2016 national data show that the majority of respondents, 66.7%, reported being single while the fewest, 0.3%, reported being in a civil union, domestic partnership, or the equivalent. The 2014 and 2012 national data reflect similar patterns. None of the respondents from all three years of the national survey reported being widowed. Thus, male respondents were likely to be single, across both the institutional and national data.

Table 5: Current Living: Where do you currently live?

| | <u>2016 College Sample</u> | <u>2016 National (n=30,792)</u> | <u>2014 National (n=26,047)</u> | <u>2012 National (n=23,342)</u> |
|------------------|----------------------------|---------------------------------|---------------------------------|---------------------------------|
| Campus residence | 58% (n=35) | 35.1% | 35.3% | 34.8% |
| Fraternity | 17% (n=10) | 2.1% | 2.7% | 2.5% |
| Other College | 20% (n=12) | .9% | 1.1% | 1.0% |
| Off-campus | 5% (n=3) | 60.7% | 59.5% | 60.1% |
| Other | 0 | 1.2% | 1.5% | 1.6% |

*National survey asks what kind of housing do you currently have?

Table 6: Relationship: What is your relationship status?

| | <u>2016 College Sample</u> | <u>2016 National</u> (n=37,593) | <u>2014 National</u> (n=30,954) | <u>2012 National</u> (n=26,760) |
|-------------------------------------|----------------------------|------------------------------------|------------------------------------|------------------------------------|
| Single | 70% (n=42) | 66.7% | 67.5% | 66.8% |
| Non-cohabiting relationship | 25% (n=15) | N/A | N/A | N/A |
| Co-habiting | 5% (n=3) | N/A | N/A | N/A |
| Serious relationship | | 28.2% | 26.9% | 26.5% |
| Marriage, civil union or equivalent | | 4.2% | 4.5% | 5.1% |
| Divorced or separated | | 0.9% | 1.1% | 1.6% |

3.10 Gender and Sexual Orientation

From the 2016 institutional survey the majority of male respondents, 95%, identified as straight/heterosexual, but 5%, identified as Bisexual. All three surveys exhibited that the majority of respondents reported being heterosexual or straight and the fewest of male respondents, ranging from 85-87.3%.

Table 7: Sexual Orientation: Which term best describes your sexual orientation?

| | <u>2016 College Sample</u> | <u>2016 National</u> (n=35,923) | <u>2014 National</u> (n=29,874) | <u>2012 National</u> (n=26,395) |
|-----------------------|----------------------------|------------------------------------|------------------------------------|------------------------------------|
| Asexual | 0% (n=0) | | | |
| Bisexual | 5% (n=3) | 3.8% | 2.5% | 2.0% |
| Gay | 0% (n=0) | 7.4% | 7.2% | 0.0% |
| Lesbian | 0% (n=0) | 0.1% | 0.0% | 6.9% |
| Pansexual | 0% (n=0) | N/A | N/A | N/A |
| Queer | 0% (n=0) | N/A | N/A | N/A |
| Questioning | 0% (n=0) | 1.8% | 1.7% | 1.2% |
| Same Gender Loving | 0%(n=0) | N/A | N/A | N/A |
| Straight/Heterosexual | 95% (n=57) | 85.4% | 87% | 87.3% |

| | | | | |
|------------------|----------|------|------|------|
| Another identity | 0% (n=0) | N/A | N/A | N/A |
| Self-Identity | N/A | 1.6% | 1.5% | 2.6% |

*National survey of years 2016 and 2014 asks “do you consider yourself to be” of any of the following categories listed above for the years 2016 and 2014. The National survey of 2012 states, “Sexual Orientation” where respondents choose a category.

3.11 Body Perceptions

The majority of respondents were within a similar weight range, and most were attempting to lose weight, or were not trying to modify their bodies at all. Respondents were asked their actual current weight, and then were asked to describe their weight, which allowed them to provide their own perceptions of their body size. Additionally, respondents were asked whether they are trying to lose weight, gain weight, maintain their weight, or whether they are not attempting to modify their weight at all. Significantly, this variable, “How do you usually describe your weight,” provides insight into how male respondents feel about their current weight, regardless of whether it is an accurate portrayal. The majority of respondents from the 2016 institutional survey, 57%, described their weight as about the right weight; meanwhile the fewest respondents, 3%, described their weight as very underweight. The majority of respondents from the institutional report of 2016, 30%, reported that they are trying to lose weight, while the fewest respondents, 20%, reported trying to stay the same weight. However, 27% of male respondents reported that they are not trying to do anything about their weight. This information informs the level of satisfaction male respondents feel about their body weight: most male respondents are unsatisfied with their current weight and wish to lose or gain weight.

Table 8: Weight: How do you usually describe your weight?

| | 2016 College Sample |
|----------------------|---------------------|
| Very underweight | 3% (n=2) |
| Slightly underweight | 12% (n=7) |

| | |
|------------------------|------------|
| About the right weight | 57% (n=34) |
| Slightly overweight | 23%(n=14) |
| Very overweight | 5%(n=3) |

Table 9: Weight Management: Are you trying to do any of the following about your weight?

| | <u>2016 College Sample</u> |
|--------------------------------|----------------------------|
| I am not trying to do anything | 27% (n=16) |
| Stay the same weight | 20% (n=12) |
| Lose weight | 30% (n=18) |
| Gain weight | 23%(n=14) |

3.12 Behaviors: Nutrition, Exercise, Drug Use, and Academics

Determining both positive and negative behaviors of respondents was centered on eating and exercise regimens, as well as drug use and academic performance. This was of particular concern because it reflected on the overall physical and mental health of respondents. Most respondents exercised twice a week. Additionally, the majority of participants did not exercise to lose weight, which may mean that most do not have a motivation to exercise other than for their overall health. The majority of respondents did not take diet pills to lose weight, use amphetamines, or anabolic steroids. Lastly, their academic performance did not seem to be affected by external factors. This portion of data, which was mainly from institutional reports, seemed to portray an overall well-being. However, the information was self-reported by respondents, and thus, may have been altered based on respondents' openness towards sharing negative habits, or inclination to provide socially desirable answers.

The diet and exercise regimen was another important variable, which showed that most respondents consume one or two servings of fruit per day, and exercise two to three times a

week. The 2016 institutional dataset indicated that the majority of respondents, 67%, reported having one to two servings of fruit per day, while the fewest respondents, 2%, had five or more servings per day. Most respondents from the 2016 institutional dataset, 22%, engaged in moderate intensity cardio or aerobic exercises for at least thirty minutes twice a week. The fewest respondents, 3%, engaged in this type of exercise five days a week. The institutional data from 2016 showed that most respondents, 22%, engaged in vigorous intensity cardio or aerobic exercise for at least twenty minutes three times a week, while only 3% did this exercise routine seven times a week. The report showed that 3% of respondents engaged in strength training exercise seven times a week, while the majority of respondents, 25%, did not engage in this exercise regimen.

Based on all three years, most of respondents did not exercise, diet, vomit or take laxatives, or take diet pills to lose weight. In the 2016 institutional survey, the majority of respondents, 58%, did not exercise to lose weight within the last thirty days, while 42% did exercise for this purpose, which shows only a sixteen-percentage point difference. The majority of respondents, 70%, did not diet to lose weight. None of the respondents vomited or took laxatives to lose weight. However, in the 2014 institutional survey, 1% of respondents vomited or took laxatives to lose weight, but 99% did not. Again, 1% of respondents vomited or took laxatives to lose weight, while 99% did not in the 2012 institutional survey. In all three years, the vast majority did not take diet pills to lose weight (97-98%).

Ninety percent of respondents of the 2016 institutional report did not use amphetamines within the last thirty days, the same statistic presented by the 2014 institutional data. The 2012 institutional data showed that 93% of respondents did not use

amphetamines within the last thirty days. The 2016 data showed that 7% of respondents have used amphetamines but not in the last thirty days, 4% for the 2014 data, and 3% for the 2012 data.

The majority of respondents, 45%, from the 2016 institutional survey believed that the typical student at their school did not use amphetamines within the last thirty days. The percentages were higher in 2014 (62%) and 2012 (57%). From the 2016 survey, 23% of respondents believed that the typical student at their school has used amphetamines, but not within the last thirty days (16% in 2014 and 9% in 2012). In 2016, most thought other students were using amphetamines 1-2 days a week (17%) or 3-5 days a week (10%). In 2014, most thought other students were using amphetamines 1-2 days week (12%) or 3-5 days a week (6%). In 2012, most thought that other students were using amphetamines 1-2 days a week (15%) or 3-5 days a week (9%).

No respondents reported using anabolic steroids within the last thirty days in the 2016 institutional survey, whereas 3-4% reported use but not in the last thirty days in 2012 and 2014.

Table 10: Drug use: Within the last thirty days, on how many days did you use anabolic steroids (Testosterone)?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|-------------------------------|----------------------------|----------------------------|----------------------------|
| Never used | 100% (n=60) | 96%(n=70) | 97%(n=135) |
| Have used, but not in last 30 | 0% (n=0) | 4%(n=3) | 3%(n=4) |

*Any greater usage was omitted since 0% of respondents across all three surveys identified such usage.

From the 2016 institutional data, the majority of respondents, 53%, believed that the typical student at their school never used anabolic steroids within the last thirty days. The percentages were higher in 2014 (70%) and in 2012 (61%). In addition, 16-17% believed that the typical student had used anabolic steroids but not within the last days in the 2016 and 2012 institutional survey (and 10% in 2014). Eleven to 12% of respondents from the 2012 and 2014 institutional surveys believed that the typical student at their school used anabolic steroids one to two days within the last thirty days (and 20% in 2016).

Academics were another variable. Respondents were asked for their year of enrollment as well as whether an eating disorder or eating problem affected their academic performance. Additionally, respondents were asked if extracurricular activities impacted their academics. Most respondents were second and third year undergraduates whose academic performance was unaffected by an eating disorder or extracurricular activities. Across all institutional reports studied, an eating disorder or eating problem did not affect almost all respondents' academic performance. In fact, in the 2016 report, the academic performance of 98% of respondents was unaffected by an eating disorder or problem. This was the same for 90% of the 2014 data and 96% of the 2012 data. Two percent of respondents of the 2016 institutional survey experienced an eating disorder or eating problem that resulted in a lower exam grade, 1% from the 2014 survey, and none of the respondents from the 2012 survey. None of the respondents from either year received a lower grade for their course because of an eating disorder or eating problem within the last twelve months. Additionally, none of the respondents from either year received an incomplete or dropped a course due to an eating disorder or problem. While none of the respondents from the 2016 and 2014 survey

experienced significant disruption on their thesis due to an eating disorder or eating problem, 1% of respondents from 2012 survey had their thesis disrupted due to this issue.

Academic status was an important variable because the year of enrollment in an institution may impact students' experiences related to peer influences and academic stressors. While the year enrolled in school does not inform age, it does account for the particular experiences individuals may face during their undergraduate years. Both surveys allowed respondents to answer from first year until fourth year undergraduate, yet the national survey also included other categories after fourth year undergraduate such as graduate/professional degree student, non-student, high school student taking classes, non-degree student, faculty or staff, and other. The majority of respondents from the institutional survey of 2016, were second year and fourth year undergraduate students. The national reports were not much different, though this survey accounted for all ages beyond undergraduate college years. The majority of respondents of the 2016 survey were juniors, 23%. Differing by only .1-percentage point difference, the majority of respondents, 23.3%, were juniors in the national surveys of 2014 and 2012.

Table 11: Nutrition: How many servings of fruits and vegetables do you usually have per day?

| | <u>2016 College Sample</u> |
|----------------------------|----------------------------|
| 0 servings per day | 0% (n=0) |
| 1-2 servings per day | 67% (n=40) |
| 3-4 servings per day | 32% (n=19) |
| 5 or more servings per day | 2%(n=1) |

Table 12: Exercise: On how many of the past 7 days did you do moderate intensity cardio or aerobic exercise for at least 30 minutes, vigorous intensity cardio or aerobic exercise for at least 20 minutes, or strength training exercise for 8-12 repetitions each?

| <u>2016 College Sample</u> | Moderate | Vigorous | Strength |
|----------------------------|------------|------------|------------|
| 0 days | 20% (n=12) | 20% (n=12) | 25% (n=15) |
| 1 days | 12% (n=7) | 9% (n=5) | 10% (n=6) |
| 2 days | 22%(n=13) | 12%(n=7) | 17%(n=10) |
| 3 days | 20% (n=12) | 22% (n=13) | 12% (n=7) |
| 4 days | 5%(n=3) | 7%(n=4) | 13%(n=8) |
| 5 days | 3%(n=2) | 20%(n=12) | 12%(n=7) |
| 6 days | 10%(n=6) | 7%(n=4) | 8%(n=5) |
| 7 days | 8%(n=5) | 3%(n=2) | 3%(n=2) |

Table 13: Diet and Exercise: Within the last 30 days, did you do any of the following?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|--|----------------------------|----------------------------|----------------------------|
| Exercise to lose weight | | | |
| No | 58% (n=34) | N/A | N/A |
| Yes | 42% (n=25) | | |
| Diet to lose weight | | | |
| No | 70% (n=41) | N/A | N/A |
| Yes | 31% (n=18) | | |
| Vomit or take laxatives to lose weight | | | |
| No | 100%(n=60) | 99%(n=72) | 99%(n=139) |
| Yes | 0%(n=0) | 1%(n=1) | 1%(n=2) |
| Take diet pills to lose weight | | | |
| No | 97%(n=58) | 97%(n=71) | 98%(n=136) |
| Yes | 3%(n=2) | 3%(n=2) | 2%(n=3) |

Table 14: Drug use: Within the last thirty days, on how many days did you use other amphetamines (diet pills, bennies)?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|-------------------------------|----------------------------|----------------------------|----------------------------|
| Never used | 90% (n=54) | 90%(n=66) | 93%(n=128) |
| Have used, but not in last 30 | 7% (n=4) | 4%(n=3) | 3%(n=4) |
| 1-2 days | 0% (n=0) | 3%(n=2) | 1%(n=1) |
| 3-5 days | 0%(n=0) | 0%(n=0) | 2%(n=2) |
| 6-9 days | 0%(n=0) | 1%(n=1) | 2%(n=2) |
| 10-19 days | 2%(n=1) | 1%(n=1) | 0%(n=0) |
| 20-29 days | 2%(n=1) | 0%(n=0) | 0%(n=0) |
| Used daily | 0%(n=0) | 0%(n=0) | 0%(n=0) |

Table 15: Drug use: Within the last thirty days, how often do you think the typical student at your school used other amphetamines (diet pills, bennies)?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|-------------------------------|----------------------------|----------------------------|----------------------------|
| Never used | 45% (n=27) | 62%(n=45) | 57%(n=79) |
| Have used, but not in last 30 | 23% (n=14) | 16%(n=12) | 9%(n=13) |
| 1-2 days | 17% (n=10) | 12%(n=9) | 15%(n=21) |
| 3-5 days | 10%(n=6) | 6%(n=4) | 9%(n=12) |
| 6-9 days | 3%(n=2) | 1%(n=1) | 4%(n=5) |
| 10-19 days | 0%(n=0) | 1%(n=1) | 2%(n=3) |
| 20-29 days | 2%(n=1) | 0%(n=0) | 1%(n=1) |
| Used daily | 0%(n=0) | 1%(n=1) | 3%(n=4) |

Table 16: Drug use: Within the last thirty days, how often do you think the typical student at your school used anabolic steroids (Testosterone)?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|-------------------------------|----------------------------|----------------------------|----------------------------|
| Never used | 53% (n=32) | 70%(n=51) | 61%(n=85) |
| Have used, but not in last 30 | 17% (n=10) | 10%(n=7) | 16%(n=22) |

| | | | |
|------------|------------|-----------|------------|
| 1-2 days | 20% (n=12) | 12% (n=9) | 11% (n=16) |
| 3-5 days | 7% (n=4) | 1% (n=1) | 6% (n=9) |
| 6-9 days | 2% (n=1) | 4% (n=3) | 3% (n=4) |
| 10-19 days | 2% (n=1) | 3% (n=2) | 1% (n=1) |
| 20-29 days | 0% (n=0) | 0% (n=0) | 1% (n=1) |
| Used daily | 0% (n=0) | 0% (n=0) | 1% (n=2) |

Table 17: Academic Status: What is your year in school?

| | <u>2016 College Sample</u> | <u>2016 National</u> | <u>2014 National</u> | <u>2012 National</u> |
|--|----------------------------|----------------------|----------------------|----------------------|
| 1 st year undergraduate | 27% (n=16) | 20% | 18.9% | 19% |
| 2 nd year undergraduate | 28% (n=17) | 20% | 20% | 19.9% |
| 3 rd year undergraduate | 13% (n=8) | 23% | 23.3% | 22.7% |
| 4 th year undergraduate | 32% (n=19) | 22.1% | 22.5% | 22.6% |
| 5 th year or more undergraduate | 0% (n=0) | N/A | N/A | N/A |
| Graduate or professional | 0% (n=0) | 13.2% | 13.2% | 13.8% |

*National Survey asks for "Current Academic Status."

Table 18: Academic Performance: Within the last 12 months, have any of the following affected your academic performance: Eating disorder/problem?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|--------------------------------|----------------------------|----------------------------|----------------------------|
| This did not happen to me, N/A | 98% (n=59) | 90% (n=65) | 96% (n=134) |
| Exprd, academics not affected | 0% (n=0) | 8% (n=6) | 4% (n=5) |
| Received lower grade exam | 2% (n=1) | 1% (n=1) | 0% (n=0) |
| Received lower grade course | 0% (n=0) | 0% (n=0) | 0% (n=0) |
| Received incomplete/dropped | 0% (n=0) | 0% (n=0) | 0% (n=0) |
| Significant disruption thesis | 0% (n=0) | 0% (n=0) | 1% (n=1) |

3.13 Mental Health: Symptoms and Diagnosis

Mental health was a significant variable because it indicated respondents' mental health symptoms and diagnoses, which informed the next section on treatment. This section measured whether respondents had depressive symptoms, or had experienced a traumatic event that caused overwhelming negative emotions. In addition, the survey showed the number of respondents with a psychiatric condition as well as those who were diagnosed and/or treated with anorexia, bulimia, and depression. The majority of respondents did not have a psychiatric condition, nor did they experience a traumatic event that affected their mental well-being. Finally, most participants were not diagnosed or treated for anorexia, bulimia, or depression. Most respondents did not report receiving any kind of mental health service, but said that they would see a mental health professional in the future if they were struggling with a personal issue.

The majority of respondents never felt so depressed that it was difficult to function, which ranged from 56-68%. The next most common category was respondents who have felt so depressed that it was difficult to function, but not in the last twelve months. This held true for 14% of respondents from the 2016 survey, 27% from 2014, and 16% from 2012. Meanwhile across all three years of the institutional survey, the fewest respondents have felt so depressed that it was difficult to function in the last thirty days. This includes 3% of respondents from 2016, 3% from 2014, and 5% from 2012. Nearly all respondents from 2016, 97%, did not report having a psychiatric condition.

The majority of respondents from the national and institutional surveys reported not having had a traumatic event that pertains to personal appearance and health in the institutional report, and to the frequency of negative sentiments caused by this personal event

in the national data; such as feelings of fear, helplessness, or horror. From the 2016 institutional report, 87% of respondents' personal appearance was not traumatic or very difficult to handle within the last twelve months, while 13% of respondents admitted that their personal appearance was traumatic or very difficult to handle within this time frame. Similarly, most respondents, 90%, did not have a personal health issue that was traumatic or very difficult to handle within the last twelve months, whereas 10% did struggle with a personal health issue that invoked this negative experience. The national data show similar results; 67.7% of respondents from the 2016 national report never experienced a traumatic event that caused them to feel intense fear, helplessness, or horror, and 67.6% of respondents from 2014 and 68.3% of respondents from 2012 fell under this category as well. It is important to note that while the national surveys of 2016 and 2014 asked respondents to report this information based on the frequency of a traumatic event that caused such negative sentiments, the 2012 national survey asks when respondents had such experiences. The fewest respondents from the national reports of 2016 and 2014 reported experiencing a traumatic event that caused them to feel intense fear, helplessness, or horror four to five times a week. Particularly, 2% of respondents from 2016 and 1.8% of respondents from 2014 reported having experienced traumatic sentiments four to five times a week. The fewest respondents, 7.8%, from the 2012 national survey reported experiencing a traumatic event that caused them to feel intense fear, helplessness, or horror both prior to college and after starting college. Nearly all respondents from the 2016 institutional report reported not having a psychiatric condition; only 3% reported having one.

Across all three years of the institutional reports, the majority of respondents reported not having been diagnosed with depression, which includes 90% of respondents from 2016, 89% from 2014, and 90% from 2012.

The majority of respondents did not report having been diagnosed or treated by a professional for anorexia, bulimia or depression. Specifically, all respondents from the 2016 and 2014 institutional reports reported not having been diagnosed or treated by a professional for anorexia. Similarly, 99% of respondents from 2012 reported not having been diagnosed or treated with this mental health condition. The same statistics paralleled the treatment and diagnoses for bulimia all three years of the report. Most respondents reported not having been diagnosed or treated by a professional for depression within the last twelve months; 95% of respondents across all three years of the institutional report.

Table 19: Mental Health: Have you ever felt so depressed that it was difficult to function?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|-----------------------|----------------------------|----------------------------|----------------------------|
| Never | 68% (n=40) | 56% (n=41) | 60% (n=84) |
| Not in last 12 months | 14% (n=8) | 27% (n=20) | 16% (n=23) |
| In the last 2 weeks | 7% (n=4) | 7% (n=5) | 6% (n=9) |
| In the last 30 days | 3% (n=2) | 3% (n=2) | 5% (n=7) |
| In the last 12 months | 9% (n=5) | 7% (n=5) | 12% (n=17) |

Table 20: Mental Health: Do you have any of the following: Psychiatric condition?

| | <u>2016 College Sample</u> |
|-----|----------------------------|
| No | 97% (n=58) |
| Yes | 3% (n=2) |

Table 21: Mental Health: Within the last 12 months, have any of the following been traumatic or very difficult for you to handle?

| | <u>2016 College Sample</u> | <u>2016 National (n=35,827)</u> | <u>2014 National (n=29,094)</u> | <u>2012 National (n=20,455)</u> |
|------------------------|----------------------------|---------------------------------|---------------------------------|---------------------------------|
| Personal appearance | | | | |
| No | 87% (n=52) | N/A | N/A | N/A |
| Yes | 13% (n=8) | | | |
| Personal health issue | | | | |
| No | 90% (n=54) | N/A | N/A | N/A |
| Yes | 10% (n=6) | | | |
| Never | N/A | 67.7% | 67.6% | 68.3% |
| 1 time | N/A | 14.0% | 14.0% | n/a |
| 2-3 times | N/A | 10.8% | 11.0% | n/a |
| 4-5 times | N/A | 2.0% | 1.8% | n/a |
| More than 5 times | N/A | 5.6% | 5.5% | n/a |
| Prior to college | N/A | N/A | N/A | 14.3% |
| After starting college | N/A | N/A | N/A | 9.6% |
| Both | N/A | N/A | | 7.8% |

*National survey for years 2016 and 2014 asked if respondents experienced a traumatic event that caused them to feel intense fear, helplessness, or horror (and how many times).

Table 22: Diagnosis: Have you ever been diagnosed with depression?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|-----|----------------------------|----------------------------|----------------------------|
| No | 90% (n=54) | 89%(n=64) | 90%(n=123) |
| Yes | 10% (n=6) | 11%(n=8) | 10%(n=14) |

Table 23: Diagnosis: Within the last 12 months, have you been diagnosed or treated by a professional for any of the following?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|------------|----------------------------|----------------------------|----------------------------|
| Anorexia | | | |
| No | 100% (n=59) | 100% (n=73) | 99%(n=138) |
| Yes | 0% (n=0) | 0%(n=0) | 1%(n=1) |
| Bulimia | | | |
| No | 100% (n=60) | 100%(n=73) | 99%(n=139) |
| Yes | 0% (n=0) | 0%(n=0) | 1%(n=1) |
| Depression | | | |
| No | 95%(n=57) | 95%(n=69) | 95%(n=133) |
| Yes | 5%(n=3) | 1%(n=1) | 1%(n=1) |

*Note: I combined yes treated with medication yes treated with psychotherapy etc. together.

3.14 Health Education and Counseling

This section of the survey addressed whether respondents are informed about depression and anxiety, nutrition, and physical activity by their institution, as well as their interest in receiving new information on eating disorders, nutrition, and physical activity. The majority of respondents have received information on depression and anxiety, nutrition, and physical activity. They were not interested in receiving information from their college or university on eating disorders.

Whether respondents have received information on the following topics may display their awareness of healthy behaviors, both mental and physical, or lack thereof. The majority

of respondents of the 2016 institutional data responded “yes,” when asked whether they received information on depression or anxiety from their college or university. This included 63% of respondents in 2016, 61% in 2014, and 60% who responded, “yes” in all three years. Additionally, most respondents reported, “yes,” that they had received information on nutrition from their college or university. This included 58% of respondents in 2016, 65% in 2014, and 71% in 2012. The majority of respondents reported having received information on physical activity from their college or university, while fewer respondents, 40%, reported not receiving such information. Finally, 58% of male respondents in 2016 reported not having received information on eating disorders from their college or university, and similarly, 66% of male respondents in 2014 reported not having received this information. However, in 2012 most respondents, 60%, reported that they received information on eating disorders from their college or university. Thus, most respondents were well informed on depression and anxiety, nutrition, and physical activity but not on eating disorders from their college or university. This means that regardless of their behaviors, such respondents are aware of healthy patterns in both mental and physical realms.

The 2016 institutional data displayed that 65% of male respondents were not interested in receiving information on eating disorders from their college or university, while only 35%, were interested in receiving this information. On the other hand, 70% of male respondents were interested in receiving information on nutrition from their college or university. Similarly, 62% of respondents were interested in receiving information on physical activity from their college or university. The desire for the majority of respondents to receive information on nutrition and physical activity, but not on eating disorders, may be because of the stigma that surrounds mental illnesses; male respondents may prevent

association with this stigma by refraining from receiving information on the topic of eating disorders. These data also align with the qualitative data, which suggest that men are reluctant to speak about any issues with negative body image and even seek treatment with a disorder that has been thought to be a “female” issue.

Table 24: Health Education: Have you received information on the following topics from your college or university?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|--------------------|----------------------------|----------------------------|----------------------------|
| Depression/Anxiety | | | |
| No | 37% (n=22) | 39% (n=28) | 40% (n=56) |
| Yes | 63% (n=38) | 61% (n=44) | 60% (n=83) |
| Nutrition | | | |
| No | 42% (n=25) | 35% (n=25) | 29% (n=41) |
| Yes | 58% (n=35) | 65% (n=47) | 71% (n=99) |
| Physical Activity | | | |
| No | 40% (n=24) | N/A | N/A |
| Yes | 60% (n=36) | | |
| Eating Disorders | | | |
| No | 58% (n=35) | 66% (n=47) | 40% (n=56) |
| Yes | 42% (n=25) | 34% (n=24) | 60% (n=83) |

Table 25: Future Health Education: Are interested in receiving information on the following topics from your college or university?

| | <u>2016 College sample</u> |
|-------------------|----------------------------|
| Eating disorders | |
| No | 65% (n=39) |
| Yes | 35% (n=21) |
| Nutrition | |
| No | 30% (n=18) |
| Yes | 70% (n=42) |
| Physical Activity | |
| No | 38% (n=23) |
| Yes | 62% (n=37) |

Table 26: Treatment: Have you ever received psychological or mental health services from any of the following?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|--|----------------------------|----------------------------|----------------------------|
| Counselor/ Therapist Psychologist | | | |
| No | 68% (n=41) | 67% (n=49) | 75% (n=106) |
| Yes | 32% (n=19) | 33% (n=24) | 25% (n=35) |
| Psychiatrist | | | |
| No | 93% (n=56) | 90% (n=65) | 90% (n=127) |
| Yes | 7% (n=4) | 10% (n=7) | 10% (n=14) |
| Other medical provider | |] | |
| No | 92% (n=55) | N/A | N/A |
| Yes | 8% (n=5) | | |
| Current college/university's Counseling or Health Service | | | |
| No | 70% (n=42) | 74% (n=54) | 84% (n=117) |
| Yes | 30% (n=18) | 26% (n=19) | 16% (n=23) |

Table 27: Future Circumstance: If in the future you were having a personal problem that was really bothering you, would you consider seeking help from a mental health professional?

| | <u>2016 College Sample</u> | <u>2014 College Sample</u> | <u>2012 College Sample</u> |
|-----|----------------------------|----------------------------|----------------------------|
| No | 30% (n=18) | 29% (n=21) | 42% (n=58) |
| Yes | 70% (n=42) | 71% (n=52) | 58% (n=81) |

In conclusion, the quantitative data indicate the demographics, environmental influences, perceptions, behaviors, mental health, and treatment of respondents. The institutional and national surveys of 2016, 2014, and 2012 were not too far off from each other. Questions between the two sets of data differ, and this may pose a potential limitation for the study.

Chapter Four: Discussion and Conclusions

The most significant findings encompass gender, sexuality, body perceptions, peer influence, supplement use, eating disorders and body dysmorphic disorder. Gender played a major part since society dictates certain ideals of what it means to be masculine and feminine, roles that girls and boys begin to embody during adolescence. Sexuality also played a role, which was seen in particular through the men in this study who were motivated by muscular ideals. Institutional and national reports showed that male respondents were predominantly heterosexual. Most men perceive muscularity as a reflection of one's masculinity, and this drive for muscularity explained other behaviors. Men losing weight was not shown to be a common practice. Peer influence was shown to commonly affect men and to be very powerful, especially in athletic teams when members tease one another about their weight. Men oftentimes use diet supplements and steroids to achieve muscular ideas that are re-enforced by peers. Binge eating disorder (BED) and body dysmorphic disorder were the most common among male respondents. As a result of these findings, several policy changes and education strategies must be implemented. There must be more federal regulations and warning labels on diet supplements. Men's use of supplements should be monitored during athletic practices, and education programs should be incorporated throughout the season.

4.1 Gender

Females are most thought to experience body image issues and related disorders, which is justified by research on the phenomenon. However, the findings delineate male's body image and related pathology as unique.

One respondent elaborated on the distinction between males and females in regards to the media. They explained that media messages are mostly oriented towards women, while there is a lack of media messages orientated towards men, especially those that depict body ideals. They believed that this is a result of the gender ideology embedded in American society, in which boys are taught that they “can do anything” without constraint, and thus typically have a positive body image. Furthermore, this respondent noted that as a result of the gender ideology embedded in American society, men do not have a stigma of being overweight or too thin, that surrounds females in the mainstream media. However, gender differences are prominent in treatment. As we have seen, the stigma that surrounds men with body image issues, including relevant disorders, forbids them from vocalizing their struggles, and more severely, from seeking treatment. Both respondents from national organizations addressed the gender inequality that exists in treatment programs, which are geared towards women. While male participant-body builders exhibited no body image distortion, female participants did (Peters and Phelps: 2001).

4.2 Sexuality

Although discourse on the subject of men's body images was previously focused on heterosexual men, the data display the differences among men of non-heteronormative sexual orientation. According to the objectification theory, those in the sexual minority feel the most

pressure to achieve the ideal body, motivated by their search for sexual male partners. Engeln-Maddox, Miller and Doyle (2011) found that gay men, along with heterosexual women scored higher than any other group for body surveillance; including heterosexual men and lesbian women. Heterosexual women and gay men also scored higher on eating disordered behavior than those groups (Engeln-Maddox et al. 2011). Another study by Beren, Hayden, Wilfley, and Girlo (1995) showed that gay men experience more distress in relation to their bodies than straight men. Specifically, they were more distressed in psychosocial measures that related to body dissatisfaction; namely, childhood teasing, awareness of the self and anxiety in the presence of others, and peer and family pressure to lose weight (Beren, Hayden, Wilfley, and Girlo: 1995). This study explained the results by concluding that homosexual men's association with the gay community increased men's vulnerability to body dissatisfaction. The literature represented gay men's increased body dissatisfaction, particularly in comparison to heterosexual men. During interviews, respondents mentioned the pattern of gay or transgender men's excessive concern with their bodies. The respondents that were interviewed addressed that gay male patients strive for a more feminine physique that is lean, while heterosexual male patients want to attain society's masculine ideals. The quantitative data could not assess this potential link.

4.3 Body Perceptions

There is an overall perception that men should be strong, dictated by a patriarchal society in which they must fulfill masculine virtues. In fact, masculinity equates to muscularity. The body ideals of men described by respondents largely correlated with ideals frequently depicted by the media in Chapter 1. This drive for muscularity is significant because it oftentimes leads to other behaviors, such as supplement use.

Respondents emphasized the ideal body image for men, which is lean and muscular. The majority of men, which practitioners described, are not attempting to be thinner, but rather, more muscular. Respondents emphasized that men want large shoulders, strong arms, a small waist, and strong glutes and thighs. While body ideals differ in male-athletes, they are similar to those of non-athletes, but intensified. Following this pattern of gaining muscle, two other respondents mentioned that male athletes want to be “big,” “ripped,” and “lean.” This finding is similar to Pritchard’s (2014) study that determined that muscular ideals were central to male respondents within this study. Pritchard and Cramblitt (2014) also determined men’s drive for muscularity, but showed this correlation with their media use for information about ideals.

Meanwhile, the institutional 2016 survey provided insight into how male respondents feel about their current weight, regardless of whether it portrayed the reality of their weight. This was achieved by asking participants to describe their weight. This institutional report showed that the majority of respondents reported satisfaction with their weight, or at least describing their weight as “about the right weight.” The fewest respondents described their weight as very underweight. This was not much different from the qualitative interviews.

Although respondents revealed little insight on the media’s role in this phenomenon, the ideas described directly correlate to the literature on media, which endorse these similar ideals men embody. Pritchard and Cramblitt (2014) found a correlation between men’s drive for muscularity and internalization of general and non-athletic images. Moreover, drive for muscularity in men correlated with their media use for information about body ideals (Pritchard and Cramblitt 2014). Thus, while respondents did not mention the media, they highlighted ideals that correlate with and are promoted by the media.

Finally, McCabe, Butler, and Watt (2007) highlighted the differences in body parts that males and females critically evaluate. Men did not accurately perceive their body size, in relation to their chest, waist, hips, and thighs, and overestimated all of these body parts except hips. In addition, men's ideal size of their body parts was greater than their actual size for all body parts except their hips. While respondents from the qualitative data emphasized particular body parts that men prioritize, they further showed that their ideals vary by sport. Still, both sources show that men often focus on particular parts of their body in which their perception and ideal size of their bodies do not match up.

4.4 Peer Influence

Peer influence was one of the strongest findings in the qualitative data. Males, especially at the college age, are surrounded by their peers in all sorts of environments. They are oftentimes motivated by peer validation. This makes sense given the respondents who described a population of men that tease each other, which can be harmful, especially if this teasing reflects a reality of one's bodily weight (as it sometimes does not). Given that the institutional and qualitative interviews focus on college-age males, strong peer influence is unsurprisingly prominent in these data. Unfortunately, the literature review in Chapter 1 did not directly explore peer influence.

Respondents believed that weight related teasing among peers is common, and even trumped weight related teasing among families. Most respondents agreed on the powerful influence of peers, especially in formal groups, such as athletic teams and fraternities. Most teasing is about body weight. For instance, peers may tease each other for being heavier, though respondents emphasized that this intolerance is derived from the lack of muscle, particularly in the abdominal area. Men who maintain smaller body frames are also teased by

their friends for not eating enough and lacking muscle. Respondents identified another group that is teased among families and peers, which are college-age males who are still developing. Athletes especially tease one another about their weight, which is not surprising given their desire to enhance performance by being physically in shape. Yet, respondents that worked with athletes acknowledged that even when teammates are considered in shape, they are still teased.

4.5 Supplement Use

Unfortunately, muscularity is oftentimes symbolic of one's masculinity, which has had a variety of implications on men's overall health. More young men today resort to anabolic steroid use to build the desired muscle mass that reflects this masculinity. Another common theme seen in the literature was steroid use among the general male population, while respondents emphasized use of this drug among male athletes. The idealized male body is substantially more muscular than the ideal male body of the 1960s (Pope et al. 2017). Bodybuilding competitors, children's action toys, and male models reflect these changes. In fact, muscle dysmorphia was first described in scientific literature less than twenty-five years ago, and today appears in various reports. Young men witness this seemingly high level of male muscularity on magazine covers, television, movies, and in advertisements. Predictably, men have become more concerned with their muscularity, reflected in the high prevalence of men with muscle dysmorphia today (an official diagnosis in the DSM fifth edition.) Men's use of steroids and diet supplements was a significant finding.

Respondents from national organizations identified the frequent use of steroids, laxatives, and diet supplements by their male callers. They reported that their patients take regular trips to the GNC attempting to increase the amount of protein intake. Respondents

emphasized male patients' excessive concern with their diet for building muscle, which is oftentimes achieved through the consumption of supplements. All respondents noted the health risk of supplements, since they are not regulated by the FDA, and are especially dangerous when taken without supervision. They emphasized the use of protein powder, which can be dangerous because having an abundant amount of protein can strain the kidneys and cause bone loss, and all of these risks are widely reported in prior literature. The qualitative results show that athletes, in particular, must be careful about their supplement intake, because they can be disqualified from competition if they test positive for banned substances.

While the 2016, 2014, and 2012 institutional surveys showed that the majority of men did not take diet pills to lose weight, and most respondents reported never using anabolic steroids, there were 4% of respondents from 2014, and 3% of respondents from 2012 that have used anabolic steroids (though not in the last 30 days). The small sample of respondents did not completely coincide with respondents' perceptions of how often the typical student at their school used anabolic steroids within the last thirty days. While the first common response was that the typical student never used them, this category was merely more frequent than the others, and did not constitute all respondents of the sample, in reporting they had never used these steroids. The next common category across all three years of the institutional survey was that the typical student has used anabolic steroids, but not in the last thirty days.

Anabolic-androgenic steroids, which are muscle-building supplements, were prominent in the literature. Beaver, Vaughn, DeLisi, and Wright (2008) exemplified a correlation between muscle dysmorphia and anabolic-androgenic steroid use. The use of

steroids was embedded in both the results and literature; yet, the literature emphasized the use of these steroids among the general male population, not one of male-athletes. The researchers addressed the fact that while these steroids were at first restricted to elite athletes (prior to the 1980s), they have become common among nonathletic weightlifters that wish to improve their appearance, by becoming leaner and more muscular.

4.6 Eating Disorders and Body Dysmorphic Disorder

Along with influencing men's supplement use, muscular ideals of today's society impact eating disorders and body dysmorphic Disorder in male patients. Though research on this phenomenon is sparse, the results show some men suffer from eating disorders such as bulimia, anorexia BED, along with BDD.

Many respondents who work with male students at a college reiterated male patients' common diagnoses of BDD and BED. BDD, a subcategory of OCD in the DSM-5, is diagnosed in some respondents' patients more than an eating disorder. The majority of male patients with BDD wish to gain muscle weight, while a small percentage wish to lose weight. The patients with this disorder may believe that they can never have enough muscle. Other cases of BDD believe they are overweight, even though they are not.

On the other hand, more respondents noted that their male patients suffer from eating disorders more than BDD. Most respondents noted that many of their male patients have been diagnosed with an eating disorder, such as anorexia or bulimia. Respondents frequently addressed that men achieve muscular ideals by gaining muscle through exercise, and some believed their patients have tendencies to over-exercise, though some did not classify such symptomology as disordered behavior. Some noted that this is only a problem when their

male students are fatigued or getting injured. Additionally, respondents emphasized men's diet, particularly for building muscle, such as by consuming protein powder. All respondents acknowledged some men use dieting supplements. Respondents did not tie these behaviors to disorders at all times.

Yet, even more respondents that work with male students at a college emphasized the prevalence of binge eating disorder in men. However, there is an under-diagnosis of these disorders in men, which therefore makes it hard to understand such patterns of body image pathology in males.

While the experiences of men in terms of their body image from the institutional and national surveys were mostly not in align with the qualitative results, this finding may give light to the lack of willingness of men to report their problems. The qualitative interviewing included experts whose job it is to work with male patients or students in one-on-one or small group interactions where they behavior either is noticed, or is discussed. The survey is self-reported, which poses an issue, but more importantly, people may not be aware of such issues when they complete questionnaires. In counseling sessions, on the other hand, men are more oftentimes aware of their mental health or behavioral issues related to body image. Again, in contrast to these qualitative results, the institutional reports showed that nearly all respondents reported not being diagnosed or treated by a professional for anorexia or bulimia, and slightly more for depression.

4.7 Conclusion

The phenomenon of male body image is clearly an underrepresented issue. The theme in this narrative is that muscularity falsely equates masculinity. This societal virtue of masculinity tells men that they must be strong; a sign of emotional pain is one of weakness.

As a result, it has been believed that men have positive body image; any feeling other than this positivity is associated with females. This is the double standard that exists within males and females on the topic of body image and related pathology. On the contrary, the results delineate the numerous ways in which men are confronted with their body weight and shape on a regular basis. For one, the ideal body image for men is lean and muscular, which was backed up by nearly all respondents. Men are not necessarily attempting to be thinner, but gaining the right amount of muscle weight, mainly through exercise. This ideal is unique to men; women's ideal body image, although not addressed in this paper, are in stark contrast. Following the gender norms, one respondent noted that heterosexual men appear to desire this muscular physique described, while homosexual men attempt to attain what is considered a more feminine physique. Yet, sports vary by the body parts they emphasize and the way in which people can modify them. Weight-related teasing was extremely prevalent among peer relations. As a result, some men turn to diet supplements and steroid use, and sometimes develop BED or BDD.

Ultimately, to address the use of diet supplements and steroids, several policy changes and education strategies must take place. Federal regulations should be increased to address supplement and steroid use and more warning labels are needed to provide information on their risks. In addition, during athletic seasons, men's use of steroids should be monitored by administering a test at each practice. More importantly, biweekly education programs should be installed during the athletic season, where students could discuss the risk of supplement and steroid use and harm reduction strategies. Treatment programs must destigmatize negative male body image and related disorders by addressing that body image pathology is a gender-neutral issue. Additionally, treatment programs should offer all-male

groups so that men can feel comfortable in light of this stigma that surrounds them. Finally, outreach and advocacy through social media on the topic of negative male body image and related disorders is necessary.

4.8 Implications

The use of diet supplements and steroids is a serious issue that can be addressed through an increase in federal regulations. More warning labels are needed so that those who choose to consume diet supplements and steroids are aware of their health risks.

Additionally, health care practitioners should be trained in the harmful effects of steroids, particularly anabolic-androgenic steroids, and their effect on muscle dysmorphia. Also, in athletic settings particularly, there could be stricter regulations, such as testing men for steroid use during each practice. Most beneficial of all would be an education course incorporated into an athletic season that met biweekly to discuss diet supplement and steroid use. Athletes could be separated into different groups based on a self-reported survey that indicates how likely they are to use diet supplements or steroids in the future, whether they regularly use them, or do not use them at all. For the students that report that they are likely to use them or regularly use them, the program could educate them on their harm and the safest ways to use them, such as under the supervision of a medical professional. For the students who report that they are not likely to use them, the course could emphasize health risks of diet supplements and steroids over harm-reduction strategies.

Mental health services must address men's issues separately from women's. This study exemplifies how circumstances such as gender, sexuality, peer influence, athletic participation and presence of mental health disorders along with BDD, can result in varying body ideals and perceptions among men. Thus, mental health services must pay special

attention to how these factors relate to men. People must recognize that men can develop eating disorders and body image issues as well as women. This speaks to a larger issue that exists in mental health services; men's hesitance to seek mental health services. Men are reluctant to seek treatment in settings that are primarily female. This is because the message that society sends about vulnerability; being a man means not asking for help. As a result, treatment programs must destigmatize men's eating disorders or related pathology. This can be done by debunking false impressions that identify eating disorders as female disorders. For example, programs could provide statistics of the prevalence rates in which they occur in men. They could also educate patients that men are not biologically less prone to some of the bodily issues that women face, but rather, respond to societal expectations that deem it unacceptable to discuss such issues or seek treatment.

Furthermore, each mental health treatment service must offer all-male treatment settings. Men do not want to be a patient at a treatment center that is predominantly for women. Rather, men want the recognition that their experiences with eating disorders are different from women's experiences. Overall, being surrounded by predominantly females can make men feel uncomfortable. Having all-male treatment settings would limit the self-shame that men experience. This can limit the self-shame that men experience.

Treatment programs should incorporate outreach programs. These programs educate the community to assure that body image pathology is seen as a public health issue and aim to help minimize such issues. If people are educated on the subject of male body image pathology, then there may be fewer stigmas surrounding it. This awareness would also make individuals more cautious around others. Words and actions are powerful, seen through the

excessive teasing among family members, and especially peers, in this study. Not only will this change dialogue among family and peers, but also among others interacting with men.

Finally, by educating the community on these issues, behaviors and disorders related to eating pathology would be legitimized as true mental health concerns. Thus, the tension that surrounds men having negative issues with their body image would be alleviated. Rather than male body image concerns being perceived as a shortcoming of “manhood,” they would be viewed as an individualized and justified concern.

While media, such as social media, was not prominent in the results, the literature suggests a high correlation between body image and media exposure. Additionally, media exposure, compared to other factors, is an outlet that subconsciously affects individuals, and they may not be able to report it. Thus, outreach and advocacy through social media on the topic of negative male body image and related disorders is necessary. It would shift gears from the media’s portrayal of male body ideals. These media messages that are oftentimes unattainable, and lead men to resort to supplements and steroids could be revised into a more realistic message.

4.9 Limitations

One limitation of this study is that respondents included a small sample of people who work with college males, instead of college males themselves. Thus, these respondents were able to report only their patients’ experiences with these issues, rather than their own. Another limitation is that some respondents work at national organizations, which may want to portray their male callers in a positive light. This research paper looked solely at male body image, but comparing male body image to female body image would bring critical issues to light, such as the gender inequality embedded within this phenomenon. Overall,

future research should pay further attention to male body image pathology. Based on this literature review, studies have shown the increase of eating disorders in males; yet it is uncertain whether more males are developing eating disorders or whether they are simply more cognizant that it is a gender-neutral issue. Moreover, future researchers should conduct studies on the influence of peers on male body image, which was shown to play a powerful role in men's lives based on this study's results. Peer influence is a significant issue because men, especially at the college age, are constantly surrounded by peers and driven by their opinions. Future research should include assessment tests that are not created for females, so that men's similar experience with negative body image does not continue to be overestimated (NEDA 2016). Furthermore, future research should explore the influence of athletic coaches on men's behaviors and perceptions about their bodies.

References

- Ålgars, Monica, Pekka Santtila and N. Sandnabba. 2010. "Conflicted Gender Identity, Body Dissatisfaction, and Disordered Eating in Adult Men and Women." *Sex Roles* 63(1-2):118-125.
- Beaver, Kevin M., PhD., Michael G. Vaughn PhD., Matt DeLisi PhD. and John P. Wright PhD. 2008. "Anabolic-Androgenic Steroid use and Involvement in Violent Behavior in a Nationally Representative Sample of Young Adult Males in the United States." *American Journal of Public Health* 98(12):2185-7.
- Beren, Susan E., Helen A. Hayden, Denise E. Wilfley and Carlos M. Grilo. 1996. "The Influence of Sexual Orientation on Body Dissatisfaction in Adult Men and Women." *International Journal of Eating Disorders* 20(2):135-141.
- Blashill, Aaron J., Julia Tomassilli, Katie Biello, Conall O' Cleirigh, Steven A. Safren and Kenneth H. Mayer. 2016. "Body Dissatisfaction among Sexual Minority Men: Psychological and Sexual Health Outcomes." *Archives of Sexual Behavior* 45(5):1241-1247.
- Blashill, Aaron J. and Sabine Wilhelm. 2014. "Body Image Distortions, Weight, and Depression in Adolescent Boys: Longitudinal Trajectories into Adulthood." *Psychology of Men & Masculinity* 15(4):445-451.
- Drummond, Murray J. 2005. "Men's Bodies Listening to the Voices of Young Gay Men." *7(3):270.*

- Duggan, Scott J. and Donald R. McCreary. 2004. "Body Image, Eating Disorders, and the Drive for Muscularity in Gay and Heterosexual Men: The Influence of Media Images." *Journal of Homosexuality* 47(3):45-58.
- Engeln-Maddox, Renee, Steven A. Miller and David M. Doyle. 2011. "Tests of Objectification Theory in Gay, Lesbian, and Heterosexual Community Samples: Mixed Evidence for Proposed Pathways." *Sex Roles* 65(7-8):518-532.
- Feldman, Matthew B. and Ilan H. Meyer. 2007. "Eating Disorders in Diverse Lesbian, Gay, and Bisexual Populations." *International Journal of Eating Disorders* 40(3):218-226.
- Kaminski, Patricia L., Benjamin P. Chapman, Sandra D. Haynes and Lawrence Own. 2005. "Body Image, Eating Behaviors, and Attitudes Toward Exercise among Gay and Straight Men." *Eating Behaviors* 6(3):179-187.
- Kanayama, Gen, Steven Barry, James I. Hudson and Pope, Harrison G., Jr. 2006. "Body Image and Attitudes Toward Male Roles in Anabolic-Androgenic Steroid Users." *The American Journal of Psychiatry* 163(4):697-703
- Kimmel, Sara B. and James R. Mahalik. 2005. "Body Image Concerns of Gay Men: The Roles of Minority Stress and Conformity to Masculine Norms." *Journal of Consulting and Clinical Psychology* 73(6):1185-1190.
- Kneipp, Lee, Kathryn Kelly and Inessa Wise. 2011. "Trauma Symptoms as Predisposing Factors for Body Image Distortion." *Individual Differences Research* 9(3):126-137.
- Luciano, Lynne. 2002. *Looking Good: Male Body Image in Modern America*. Macmillan.

Markham, Heidi. 2017. , Retrieved January 13, 2017, 2017.

(<https://www.yahoo.com/beauty/why-men-more-body-image-200359549.html>).

McCabe, Marita P., Kelly Butler and Christina Watt. 2007. "Media Influences on Attitudes and Perceptions Toward the Body among Adult Men and Women." *Journal of Applied Biobehavioral Research* 12(2):101-118.

Oney, Christina, Elizabeth Cole and Robert Sellers. 2011. "Racial Identity and Gender as Moderators of the Relationship between Body Image and Self-Esteem for African Americans." *Sex Roles* 65(7-8):619-631.

O'Sullivan, Grant, A. and Marika* Tiggemann. 1997. "Body Dissatisfaction and Body Image Distortion in Men Who Train with Weights." *Journal of Gender, Culture, & Health* 2(4):321-329.

Palladino Green, Sharin and Mary E. Pritchard. 2003. "Predictors of Body Image Dissatisfaction in Adult Men and Women." *Social Behavior & Personality: An International Journal* 31(3):215-222.

Peters, Mark A. and Leadelle Phelps. 2001. "Body Image Dissatisfaction and Distortion, Steroid use, and Sex Differences in College Age Bodybuilders." *Psychology in the Schools* 38(3):283.

Pope, Harrison G,Jr, M.D., Khalsa, Jag H,M.S., PhD. and Bhasin, Shalender,M.B., B.S. 2017. "Body Image Disorders and Abuse of Anabolic-Androgenic Steroids among Men." *Jama* 317(1):23

Pritchard, Mary E. 2014. "Do Body Image Investment and Evaluation Relate to Bulimic Symptoms in U.S. Collegiate Men and Women in the Same Way?" *Psychology of Men & Masculinity* 15(2):163-169.

Pritchard, Mary and Brooke Cramblitt. 2014. "Media Influence on Drive for Thinness and Drive for Muscularity." *Sex Roles* 71(5-8):208-218.

"Research on Males and Eating Disorders."2016. National Eating Disorders Association, Retrieved 3/9, 2017. (<https://www.nationaleatingdisorders.org/research-males-and-eating-disorders>).

Skorek, Małgorzata and Yarrow Dunham. 2012. "Self-Enhancement Following Exposure to Idealized Body Portrayals in Ethnically Diverse Men: A Fantasy Effect of Advertising." *Sex Roles* 66(9-10):655-667.

Thompson, J. K. and Colleen M. Thompson. "Body Size Distortion and Self-Esteem in Asymptomatic, Normal Weight Males and Females." *International Journal of Eating Disorders* 5(6):1061-1068.

APPENDIX A:

Briefly explain the purpose of the research and provide a general description of the methods to be employed (200 words should be sufficient).

Purpose: The purpose of the study is to explore men's experiences with body image and related eating disorders. There is a myriad of research on women's body image, and discourse on this subject has become virtually normal. However, research on the phenomenon of male body image is sparse, and is not openly discussed. In effect, this study attempts to understand body image faced uniquely by men. Moreover, whether gender, sexuality, race, and media exposure impact experiences with eating disorders and body distortion. First, I will ask participants about their media usage. For example, "How often do you watch television, if at all?" Second, participants will be asked about the messages they internalize from the media. Specifically, the desired male body size and shape. Finally, they will be asked questions about dialogue with peers and families regarding weight and diet.

Procedure: If the desired respondent agrees to be interviewed, I will make an appointment for a face-to-face interview. I will hold interviews in a public place. Face-to-face interviews will be conducted using the interview guide. Participants will sign the consent form, if they agree to participate. After meeting with the director of the Counseling Center and the dietician, I will ask them if they would recommend other counselors and dietitians who may be willing to be interviewed. I will explain that all information will be kept confidential and that their participation is voluntary; there will be no repercussions if they choose not to participate. The interview consent form will address that participation is voluntary. I will make clear that they can refuse to answer any questions or end the interview at all times. I will ensure confidentiality.

APPENDIX B:

Consent Form

I consent to participate in this interview about the effect of media exposure on male body image. Allison Michaelis, the project researcher, has explained the purpose of the study, how the interviews will be conducted, analyzed and reported on, and the expected duration of my participation. I have had the opportunity to ask any questions that I may have regarding the study and I have received answers that meet my satisfaction. I understand that I am free to discontinue participation in this interview at any time. I understand that my participation will be kept confidential. I have read and fully understand this consent form. I sign it freely and voluntarily. A copy will be given to me upon request.

Date: _____

Signed: _____ (Participant)

Signed: _____ (Principal Investigator)

ⁱ Participants were recruited from a community in Chicago. The sample included 92 heterosexual women, 102 heterosexual men, 87 gay men, and 99 lesbian women. The Interpersonal Sexual Objectification Scale (ISOS) is a 15-item measurement that assesses Body Evaluation and Unwanted Explicit Sexual Advances. However, the study only utilized the Body Evaluation subscale, which uses a five-point scale from 1 (never) to 5 (almost always). The Objectified Body Consciousness Scale (OBCS) is a 24-item measurement of three constructs that consists of 8 items each that taps women's experiences of their bodies. This study specifically utilized the Body Shame and Body Surveillance subscales. The Body Shame subscale evaluates the tendency to feel bad about oneself when failing to meet cultural beauty standards. The Body Surveillance scale assesses the amount of time a woman spends scrutinizing her body as an observer. Eating Attitudes Test-26 (EAT-26) measures disordered eating that indicates individuals at risk for eating disorders, and differentiates between diagnosed and non-diagnosed groups.

ⁱⁱ The cross-sectional study included 357 gay males, the majority of whom were white. However, subjects also included gay men who were Latino, Asian American, multiracial and African American or Black. They averaged 34.85 years of age. The average time participants were "out" about their sexual orientation was 11.31 years. The majority of participants reported being single, partnered and living together, and partnered but not living together, married, in a civil union, or ceremonially committed. Participant's education included graduate degree, college degree, some college, high school degree, and no high school degree. Subjects completed a Web-based survey, and 2 multiple regression analyses that identified minority stress factors that associated with body image dissatisfaction and masculine body ideal distress.

The researchers utilized The Body Image Ideals Questionnaire (BIQ), which evaluates one's degree of body image satisfaction by assessing the degree of discrepancy between self-perceived physical characteristics and idealized physical characteristics. The test also considers the importance of each of these ideals to the subjects. The questionnaire includes 22 items that assess 11 physical attributes such as weight, facial features, muscle tone, and overall appearance. Participants rate how much they resemble their physical ideal on a 4-point scale for these 11 items. The scale ranges from 1 (exactly as I am) to 4 (very unlike me). They also rate how important that ideal is to them on a 4-point scale ranging from 1 (not important) to 4 (very important). In addition, the study utilized the Masculine Body Distress Ideal (MBIDS), which is an 8-item scale that assesses the amount of distress individuals would experience if failing to meet the muscular masculine body ideal. The participants rate how much distress they would feel if the items on the survey described their current physical physique. The 4-point scale ranges from 1 (not distressing at all) to 4 (very distressing). Thirdly, the Internalized Homophobia Scale (IHS) is a 9-item scale that evaluates the degree to which gay men are uncomfortable about their homosexuality and attempt to avoid homosexual feelings. The items are answered on a 5-point scale ranging from 1 (never) to 4 (often). The Stigma Scale (SS) evaluates expectations of rejection and discrimination towards homosexuality using 11 items. These items are answered on a 6-point scale including 1 (strongly disagree) and 6 (strongly agree). To determine the history of antigay physical attack, they used a single-item question to determine whether participants were physically attacked as a result of their perceived sexual orientation. Lastly, the Conformity to Masculine Norms Inventory (CMNI) was used to measure conformity to traditional masculine norms.

This assessment consists of 94 items that are answered on a 4-point scale ranging from 0 (strongly disagree) to 3 (strongly agree).

ⁱⁱⁱ There was a total of 257 participants, composed of 69 lesbians, 72 heterosexual women, 58 gay men, and 58 heterosexual men. The majority of subjects were Caucasian and the heterosexual subjects were undergraduate students at a large university in Connecticut. Students, who indicated that they were gay and lesbian were placed into one group. The majority of homosexual participants were recruited from different gay and lesbian religious, support, and social organizations in southeastern Connecticut. Individuals who identified as bisexual were not included in analyses. Body dissatisfaction was assessed through subjects' completion of The Body Size Drawings (BSD), which evaluates perceptual body dissatisfaction and estimates the level of discrepancy between individuals' current and ideal figure. They also utilized The Body Shape Questionnaire, which evaluates affective body dissatisfaction and identifies the frequency of preoccupation with body size and shape. Lastly, The Body Dissatisfaction subscale of the Eating Disorders Inventory (EDI-BD) evaluates cognitive body dissatisfaction and indicates the frequency subjects think about the size of their body, as well as specific body parts. Psychosocial Factors were evaluated through The Rosenberg Self-Esteem Scale (RSE), which evaluates global self-concept. The Physical Appearance Related Teasing Scale (PARTS) evaluates the experience of childhood teasing with two subscales, one measuring teasing about weight and size, and one measuring teasing about general physical appearance. The Public Self-Consciousness subscale of the Self-Consciousness Scale-Revised (SCS-R) evaluates awareness of self around others, and the Social Anxiety subscale of the SCS-R evaluates anxiety around others. The Expanded Social Pressure to Diet Scale-Revised (ESPD) evaluates current peer and family encouragement to lose weight. Affiliation with the Gay and Lesbian community was assessed through The Involvement Questionnaire, which measures affiliation by identifying how often subjects attend gay and lesbian activities, including support groups, political activities, and social organizations. Sexual Orientation was assessed through The Kinsey Scale, which evaluates sexual orientation by asking respondents to rate the level of attraction to both genders.

^{iv} The participants included Finnish adults aged 18 to 44 years. There were 698 women and 444 men. Body Dissatisfaction was measured through the Derogatis Sexual Functioning Inventory (DSFI). This measures human sexual functioning, as it relates to body image. Disordered eating was assessed using five items from the Eating Attitudes Test (EAT). Gender identity conflict was estimated using items from the Gender Identity Scale for Males. Participants who answered, "yes" to either feeling as though they are the opposite sex or wished the body of the opposite sex, were coded as having a conflicted gender identity. Same-gender sexual experience was determined by coding men who answered "yes" to having had sex with another man, and women who answered "yes" to having sex with another woman.

^v Participants included American undergraduate students, 84 men and 198 women. Body image evaluation was measured through the 34-item Multidimensional Body-Self Relations Questionnaire-Appearance Scales (MBSRQ-AS). This measures body evaluation subscales including self-classified weight and appearance evaluation. Self-classified weight examines how underweight or overweight participants feel, 1 being very underweight, and 5 being very overweight. Appearance evaluation includes seven items that evaluate how good looking

participants believe that they are on a scale of 1 (definitely disagree) to 5 (definitely agree). Body image investment was measured using three scales. Two measures of body image investment were from the MBSRQ-As, such as overweight preoccupation and appearance orientation. Additionally, the 15-item Drive for Muscularity Scale measured drive for muscularity. Bulimic symptoms were measured through the 36-item Bulimia Test, which assesses bingeing behaviors, purging behaviors, feelings followed by eating binges, types of food preferred during binges, and weight fluctuations.

^{vi} Data was collected from 208 college age bodybuilders, 89 females and 119 males. Such participants worked out at least 4 times per week for at least 1 hour per session with free weights and/or machines at one of the three fitness centers in the metropolitan area of Buffalo, New York. Of the 208 participants, 80 individuals reported using anabolic steroids in the past year. 128 participants reported never having used such steroids. Each participant completed a questionnaire that asked about sex, age, the number of workout sessions per week, the length of each workout, if anabolic steroids had been used for muscle growth, and if anabolic use had occurred within the past year. The figure rating scale assessed body image dissatisfaction and body image distortion. It contained 9 figure drawings of each sex ranging from thin (1) to very muscular (9). The variations in drawings were designed to display changes in muscular development. Participants rated their current body image by selected the silhouette drawing that represented

^{vii} Four hundred and twenty-five self-identified African American University students were recruited for this study from three universities in three different geographical regions in the United States. Participants included 109 men and 3116 women whose ages ranged from 18 to 22 years. Body dissatisfaction was assessed using the Body Ideals Questionnaire (BIQ). This scale contains questions on Body Image Importance and Body Image Discrepancy. Racial identity attitudes from the Multidimensional Model of Racial Identity were assessed through four subscales from Multidimensional Inventory of Black Identity-Short (MIBI-S), The four subscales are as follows: centrality, private regard, public regard, and assimilationist ideology. The Centrality subscale measures how important respondents feel African American is a part of self-definition. The Regard scale includes two subscales, Private and Public. Private Regard measures how positively individuals feel toward African Americans. A high score reveals positive feelings toward African Americans. Public Regard measures how respondents feel that others have positive feelings toward African Americans. The Assimilation Ideology subscale measures how much respondents' individuals highlight similarities between African Americans and Western society.

^{viii} Ninety-four females and 45 males were recruited from area business and universities. Their ages ranged from 19 to 68 years old. They were surveyed on body dissatisfaction through a questionnaire emailed or sent directly to individuals. Body image was assessed by asking participants 14 questions on their perceptions about their body. Responses were rated on a 5-point scale. The Mass Media Influence Subscale of the Socialization Factors Questionnaire assessed Media influence. This is a 10-item scale that includes influence of

magazine, television, and models on individuals' perceptions of themselves. Participants responded on a 5-point scale. Self-esteem levels were measured using the Rosenberg Self Esteem Scale. This scale inquires about individuals' feelings about themselves and their positive and negative emotions. Responses were measured on a 4-point scale. Family influence was also measured with multiple yes or no questions about the influence of family members on dieting and losing weight.

^{ix} The sample included 311 students in General Psychology classes at a large Western university in the United States. Specifically, there were 264 students, which were made up of 105 men and 159 women. Students enrolled in an on-line software program to take a survey to meet the requirement of their General Psychology class. Students over the age of 25 were not included in the sample.

^x Participants included 101 males, 66% whom identified as gay, 5% as bisexual, and 29% as heterosexual (Duggan and McCreary 2004:48). Because of the small number of bisexuals, they were excluded from analysis. The final sample was composed of 96 participants. The Balanced Inventory of Desirable Responding (BIDR) was used to determine whether a participant was responding in a socially desirable way (Duggan and McCreary 2004:49). The Centre for Epidemiological Studies Depression Scale (CES-D) was used to assess participants' level of depression (Duggan and McCreary 2004:49). The drive for muscularity scale (DMS) assessed participants' perception of the desire to have larger muscles. Eating Attitudes Test (EAT), Exercise and Health, and Media Image Exposure were also used. The media exposure component determined consumption rates for pornography and muscle and fitness magazines (Duggan and McCreary 2004:49).

^{xi} One hundred and sixty Asian, Hispanic, and White American male undergraduates from a university in California were randomly selected to watch TV advertisements that showcased thin women or muscular men. Those in the control group watched no ads. Fifty-seven were White and 48 Hispanic. Participants in the first experimental condition viewed 16 U.S. TV ads of women's fragrances, underwear, or beach wear, which they emphasized women's thin and attractive bodies. The second experimental condition had 16 U.S. and Australian TV ads of similar products for men, which emphasized men's lean and muscular bodies. Participants were asked to rate each ad on four criteria: "good, likeable, enjoyable, attention-getting." Additionally, subjects were asked two questions about their buying behavior; whether they had ever bought the advertised product, or whether they would buy the product in the future.

^{xii} The sample included 60 adult women and men between 18 and 26 years of age. Respondents were drawn from a university population who were mainly Anglo-Saxon or European backgrounds. The researchers utilized the Media Influences Questionnaire, a 10-item survey that assesses the messages participants receive from the media about their body. Three items measured the pressure to lose weight, another three measured the pressure to gain weight, and four items measured the pressure to increase muscle tone. Participants responded utilizing a 5-point Likert scale ranging from strongly agree to strongly disagree. The second part of the experiment was Media Exposure, which was composed of a self-report questionnaire that evaluated participants' attitudes about the media and previous media exposure. A digital imaging technique was utilized to measure actual body size, distortion of

body size, ideal body size, and the body size the participant believes the media pressures him or her to be.

^{xiii} Participants included 314 college students, 228 females and 86 males. Trauma Symptom Inventory (TSI) is a self-report inventory that measures acute and chronic symptomology. The inventory consists of 100 items regarding four areas of distress including self-dysfunction, posttraumatic stress, dysphonic mood, and sexual difficulties. Respondents rate each item according to the frequency of occurrence during the past six months on a four-point score ranging from 0 (never) to 3 (often). The Body Shape Questionnaire (BSQ) is a self-report instrument that contains 34 questions that measure concerns about body shape, which are evaluated on a 6-point Likert scale from 1 (never) to 6(always).

^{xiv} There were 30 males and 30 female undergraduate students in the sample. Participants who were included met the following criteria: were normal body weight, defined as being within 10% of ideal weight according to the Metropolitan Life Insurance Company (1960), oh history of anorexia or bulimia, no present eating disorder behaviors, and no history of obesity.

^{xv} Participants included American undergraduate students, 84 men and 198 women. Body image evaluation was measured through the 34-item Multidimensional Body-Self Relations Questionnaire-Appearance Scales (MBSRQ-AS). This measures body evaluation subscales including self-classified weight and appearance evaluation. Self-classified weight examines how underweight or overweight participants feel, 1 being very underweight, and 5 being very overweight. Appearance evaluation includes seven items that evaluate how good looking participants believe that they are on a scale of 1 (definitely disagree) to 5 (definitely agree). Body image investment was measured using three scales. Two measures of body image investment were from the MBSRQ-As, such as overweight preoccupation and appearance orientation. Additionally, the 15-item Drive for Muscularity Scale measured drive for muscularity. Bulimic symptoms were measured through the 36-item Bulimia Test, which assesses bingeing behaviors, purging behaviors, feelings followed by eating binges, types of food preferred during binges, and weight fluctuations.

^{xvi} 50 men from a large city in the western U.S. were recruited for this study. Twenty-five men reported their sexual orientation as gay and twenty-five reported as heterosexual. The mean age among participants was 30.86 years. The majority of participants were European Americans, but also included Latinos, Asian Americans, and African Americans. The researchers utilized MEBBIE, a 57-item self-report instrument that evaluates men's attitudes and behaviors about eating, exercise, and body image. Participants responded on a 6-point scale that ranged from 0 (never/strongly disagree) to 5 (always/strongly agree). The Body Dissatisfaction scale (BD) assesses self-consciousness of one's body and perceptions of having an inferior physique. The Drive for Muscularity scale assesses perceptions that certain body parts are too small. This also measures efforts to attain greater muscularity. The Emotional Eating scale consists of 9 items that evaluates eating because of negative moods and the feeling of a lack of control while eating. The Over Exercise Scale consists of 7 items that assess compulsive exercise and the outcome when exercise sessions are missed. The Fear of Fatness scale contains 11 items that evaluate faulty assumptions about being or becoming fat. The Distorted Cognitions scale consists of 5 items that measure irrational beliefs regarding one's body.

^{xvii} Participants included a total of 524 respondents who were interviewed in person. There were 396 LGB respondents, an equal number whom were white, Black, and Latino. There were also an equal number of men and women. The heterosexual comparison group was composed of 128 white men and women. The researchers used a venue-based sampling of both LGB and heterosexual respondents. Sampling venues were selected to have a diversity of cultural, political, ethnic, and sexual representation. Respondents were sampled in diverse New York City venues, such as bookstores and outdoor areas. Respondents had to be 18-59 years old, New York City residents for 2 years or more, and self-identified as heterosexual, lesbian, gay, or bisexual, male or female, and white, black, or Latino. The researchers used quota sampling so that respondents were equivalent in age, gender, and race and ethnicity. Participants were from 128 different New York City zip codes.

The researchers assessed lifetime and current eating disorders, including syndrome anorexia, bulimia, and binge eating disorder. Diagnoses were made using the computer assisted personal interview version 19 of the WMH-CIDI, which is a structured measure utilized in the National Comorbidity Study. The researchers also utilized the DSM-IV to classify participants. Three measurements assessed participation in the gay community, which analyzed gay and bisexual male subgroups. Participation in the gay community was also assessed through their involvement in political, professional, recreational, religious, or charitable organization that the respondent belonged to or frequently attended. Other gay or bisexual men also frequently attended these organizations. The study utilized a collective membership self-esteem subscale, which included four items. For instance, respondents rated on a scale how much they agreed with the following statement: "I am a worthy member of the social groups I belong to" (Feldman and Meyer, 2007:221). The scale ranged from one (strongly agree) to seven (strongly disagree). In addition, the frequency of attendance of gay and bisexual men at a gym or a recreational organization such as a sports team was measured as a dichotomous variable.

^{xviii} Participants included 131 gay and bisexual men who were enrolled in a study at a community health center in New England that attempted to identify acute HIV infection. Participants were included if they were 18 years of age or older, HIV-uninfected, and engaged in sexual risk behaviors. Sexual risk behaviors include having four or more male sex partners in the past 6 months, or condomless sex with a HIV positive male partner, or a male partner whose results are unknown, in the past six months. Participants attended office visits and follow up visits for six to nine months.

At office visits, participants were tested for HIV, received counseling, and completed computer based questionnaires that assessed demographics, psychosocial measures, and sexual behaviors. To measure body dissatisfaction, participants completed the Appearance Evaluation (AE) subscale from the Multidimensional Body-Self Relations Questionnaire. It consisted of 7 items, and participants responded to them on a five point Likert scale. The scale ranged from one "definitely disagree" to five "definitely agree." Depressive symptoms were measured using a total score from the nine-item Depression Severity Scale of the Patient Health Questionnaire Primary Care Study Group. This is a self-report assessment that detects symptoms of major depressive disorder in primary care settings. Participants reported how often they experienced each symptom. They responded based on a scale from zero "not at all" to three "nearly every day." Sexual anxiety was assessed through the Sexual Anxiety subscale of the Multidimensional Sexual Self-Concept Questionnaire. The Sexual

Anxiety scale assesses the frequency that respondents experience tension, discomfort, and anxiety surrounding one's sexual life. The scale includes four items, which are responded to using a 5-point Likert scale, ranging from zero "not at all" to four "very characteristic of me." Demographics including age, ethnicity, race, relationship status, and sexual orientation were also assessed.

^{xix} Participants included 2,139 males whose average age was 16 and 29. Data was taken from Wave 2 through Wave 4 of the National Longitudinal Study of Adolescent Health. Depressive symptoms were measured from the Center for Epidemiological Studies Depression Scale (CESD). Participants responded to items on a 4-point scale ranging from 0 (never/rarely) to 3 (most/all of the time). Body image distortion was assessed through seven orthogonal categories that were created for those aged 16 years. This measured participants' subjective perception of their weight as well as the objectively measured BMI. Participants reported their perceived weight, which ranged from very underweight to very overweight. For participants who were 21 and older, BMI categories were created which included underweight, average, overweight and obese. These categories were also created for participants who were 20 years and younger.

^{xx} The participants were 54 men between the ages of 18 and 36 who trained using weights. Participants were recruited from fitness centers in Adelaide, South Australia. Participants completed an anthropometric measurement of body shape. They also completed questionnaires regarding their perceived and desired somatotype, and measures of self-esteem and masculinity. Body dissatisfaction was measured by the discrepancy between actual and desired somatotype.

^{xxi} The researchers analyzed data from the National Longitudinal Study of Adolescent Health (Add Health). Three waves of data were collected, which included two waves during adolescence and one in early adulthood. There was a total of over 20,000 participants. Anabolic-androgenic steroid use was measured in two waves. During wave three interviews, respondents were asked whether they had ever used the steroid during their life (0=no; 1=yes). During wave three, respondents were also asked whether they had used anabolic-androgenic steroids or other performance-enhancing drugs within the last twelve months, measured on the same scale.

^{xxii} This study evaluated 89 heterosexual men who lifted weights on a daily basis, and 48 of which were anabolic-androgenic users, and 41 of which were nonusers. They examined them on measures of self-esteem, attitudes toward male roles, muscle dysmorphia, body image, eating related attitudes and behaviors. All subjects were verbally interviewed and provided with a questionnaire about demographic information, athletic history, psychiatric history, and history of drug use both licit and illicit.