

# The Effects of Body Image Perceptions and Sociocommunicative Orientations on Self-Esteem, Depression, and Identification and Involvement in the Gay Community

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**ABSTRACT.** The purpose of this study was to examine how nonverbally communicated messages based on weight and physical appearance related to antifat attitudes, image fixation, and discrimination based on physical appearance and weight on bisexual, gay, and lesbian people. Using an Internet-based sample of 233 participants (88% Anglo/Saxon or Caucasian), the results indicated Richmond and Valencic's (2000) conceptualization of image fixation negatively related to an individual's self-esteem and positively related to reported levels of depression. Results also indicated people with highly assertive and responsive communicative behaviors were less likely to hold antifat attitudes and less likely to dislike fat people. Differences between gay/bisexual males and lesbian/bisexual females were also analyzed, and gay/bisexual males had significantly higher levels of

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image fixation, antifat attitudes, dislike of fat people, weight locus of control, perceptions of self physical/weight discrimination, and depression than lesbian/bisexual females. The results also indicated lesbian/bisexual females had significantly higher levels of self-esteem and interaction and involvement within the bisexual and gay and lesbian community than gay/bisexual men.

**KEYWORDS.** Antifat attitudes, image fixation, weight locus of control, nonverbal communication, assertiveness, responsiveness

### *INTRODUCTION*

Physical appearance and attraction are two interrelated concepts that clearly impact the day-to-day lives of most people (Richmond & McCroskey, 2004). According to Richmond and McCroskey, there are five basic reasons why nonverbal physical messages are extremely important. First, the initial message we receive from another person is her or his physical appearance. Thourlby (1980) identified 10 perceptions that people make about an individual based solely on her or his physical appearance: economic level, educational level, trustworthiness, social position, level of sophistication, economic background, social background, educational background, level of success, and moral character. Richmond and McCroskey's second reason for why nonverbal messages are important is that a person's physical appearance can impact one's willingness to communicate with another individual. Often interpersonal interactions are halted based simply on the first impression an individual has of another due to her or his physical appearance. Third, an individual's physical appearance can dictate the direction a relationship may take. An individual may find another person physically attractive enough to have as a friend, but not physically attractive enough to have as a dating partner. Fourth, initial perceptions of an individual's physical appearance create in others a variety of value judgments. For example, there are stereotypical dress patterns associated with people who are jocks, nerds, sluts, preps, thugs, and so on (Richmond & McCroskey, 2004). While these dress patterns may not actually have anything to do with an individual's actual behavior, receivers unconsciously make judgments about the types of behaviors associated with each of these dress patterns. Lastly, Richmond and McCroskey note initial perceptions of an individual's physical appearance may, or may not, be an accurate representation of that individual.

For example anyone can throw on a team jersey and go to a sports bar, but that does not necessarily make that person a sports enthusiast or knowledgeable about the team who's jersey he or she is wearing. Overall, initial nonverbal messages that are communicated through physical appearance impacts how receivers within an environment will perceive and thus respond to the senders of those nonverbal messages (Richmond & McCroskey, 2004).

While perceptions of ideal physical appearances have been shown to vary by culture (Guo-Ming & Starosta, 1998; Ting-Toomey, 1999), the impact physical appearance has on the people within those cultures is consistent. People who attain physical appearance ideals are idolized and those who do not are chastised. One cultural group where physical appearance is extremely important is within the bisexual, gay, and lesbian (BGL) coculture within the United States today (Atkins, 1998). The goal of the current study is to examine the impact that image fixation, antifat attitudes, sociocommunicative orientation (assertiveness and responsiveness), and discrimination based on physical appearance and weight have on BGL individual's self-esteem, depression, and identification and involvement in the gay community. Before discussing the rationale for the current study, a literature review is presented, examining BGL physical images, image fixation, antifat attitudes, and sociocommunicative orientation.

### ***Bisexual, Gay, and Lesbian Physical Images***

As Atkins (1998) noted, there is an overemphasis on physical appearance within the gay, lesbian, bisexual, transgendered, queer (GLBTQ) community. Currently, there is a breadth of research examining both gay/bisexual male and lesbian/bisexual female's perceptions of physical appearance, but these literatures rarely examine both groups together. For this reason, this section will examine the effects of body image on gay men and lesbians separately.

#### ***Body Image and Gay Men***

Considerable research attention has examined body satisfaction among gay men and how it differs from heterosexual males. The earliest study to notice gay men and straight men differed in their perceptions of physical appearance was conducted by Prytula, Wellford, and DeMonbreun (1979). In this study, the researchers concluded gay adolescents and straight male adolescents significantly differed in their perceptions of

“physical appearance, the perception of their physical appearance by others, and their perception of how their physical appearance was perceived by others” (p. 567). Overall, the gay adolescents in the study had less psychologically healthy body images. Unfortunately, this trend does not stop in adolescents and has consistently been seen in both college samples and adult samples (Morrison, Morrison, & Sager, 2004).

Results of a meta-analysis conducted by Morrison, Morrison, and Sager (2004) reported gay men were significantly less satisfied with their overall physical appearance when compared to straight men. This lower body satisfaction among gay men may be one of the reasons why gay men account for a much larger amount of the eating disorders seen among males. While males account for approximately 5–10% of eating disorders being treated in the United States (Barry & Lippman, 1990), Russell and Keel (2002) noted that, in eating disorder research, where sexual orientation is reported, gay men account for 10–42% of the reported participants in those samples, so gay men tend to be disproportionately overrepresented among men seeking treatment for eating disorders. Furthermore, a study by Williamson and Hartley (1998) noted negative self-perceptions of one’s physical appearance were negatively related to gay men’s self-esteem, but unrelated to straight men’s self-esteem.

While comparisons of body satisfaction and eating disorders between gay men and straight men differ, there are some facets of physical appearance where gay men and straight men have shown similarities: their desires for thin sexual partners. In a study conducted by Boroughs and Thompson (2002), the researchers examined the effect exercise (no activity, runners, and body builders) had on perceptions of personal physical appearance and partner physical appearance preference between gay and straight men. While both gay and straight men desired physical ideals smaller than their own size, gay men wanted partners who were significantly smaller than themselves. When Boroughs and Thompson’s research is coupled with the finding from Brand, Rothblum, and Solomon (1992), that men as a whole tend to think a person’s weight has a lot to do with sexual attraction, a reason why so many gay men have body image disorders begins to emerge. Essentially, gay men perceive weight to be a strong factor in physical attraction, and gay men generally want sexual partners that are thinner than they are;<sup>1</sup> therefore, to attract thin partners, many gay men go to dieting and exercise extremes to attract potential partners. While there is no definitive answer as to why gay men are more likely to have lower body satisfaction than straight men, a number of theories have been proposed ranging from incomplete psychosexual

development as a result of dysfunctional family roles and gender role disturbance (Fichter & Daser, 1987), to sociocultural enculturation of gay men into the gay male community (Siever, 1994), to the effects of internalized homonegativity (Williamson & Hartley, 1998).

### *Body Image and Lesbians*

While the 1980s saw a proliferation of research examining gay men and body image, the first piece written about lesbians was not written until 1987 by Laura Brown. Brown (1987) drew on her experience as a clinical psychologist to write about the cultural factors that created lesbian body images and noted most previous research on body image was written from an exclusively heterosexual female standpoint. Brown theorized that as a lesbian detaches herself from her patriarchal upbringing she will be able to overcome the fat-oppression she has experienced in her life: "I hypothesize that the more a lesbian has examined and worked through her internalized homophobia, the less at risk she is to be affected by the rules that govern fat oppression" (p. 299). While this notion sounds reasonable, the empirical research analyzing differences between lesbians and straight women is not as clear.

In a study conducted by Striegel-Moore, Tucker, and Hsu (1990), the researchers wanted to compare body image dissatisfaction across three groups of women: lesbians, straight feminists, and nonfeminist straight females. Ultimately, the researchers did not find any differences between the three groups on body esteem (sexual attractiveness, weight concern, physical condition, drive for thinness, and body dissatisfaction) nor eating behaviors (bulimia, binge eating, and dieting). The researchers concluded "although lesbian ideology rejects our culture's narrowly defined ideal of female beauty and opposes the overemphasis placed on women's physical attractiveness, such ideology may not be strong enough to enable lesbians to overcome already internalized cultural beliefs and values about female beauty" (p. 498).

In a meta-analysis of the differences between straight females and lesbians regarding body satisfaction, Morrison, Morrison, and Sager (2004) found lesbians slightly more satisfied with their bodies than straight women. Much like the findings of the Striegel-Moore, Tucker, and Hsu (1990) study, the results of Morrison, Morrison, and Sager illustrated the cultural hold women face over perceptions of physical attractiveness.

Herzog, Newman, Yeh, and Warshaw (1992) conducted a study examining body image satisfaction, but also examined what women are

looking for in a partner as well. Like gay and straight men (Boroughs & Thompson, 2002), both lesbians and straight women preferred thin partners. However, straight women wanted significantly smaller romantic partners than lesbians, which led the researchers to conclude that lesbians and straight women have differing perceptions of physical ideals. Interestingly, lesbian participants in this study selected an ideal shape for a potential partner that was heavier than the figures they thought potential partners were wanting. While lesbians found heavier women to be attractive, they believed other lesbians were looking for thinner women.

### ***Image Fixation***

Research examining the concept of image fixation dates back to the 1800s (Phillips, 1991). According to Richmond and McCroskey (2004), image fixation is “an often-painful preoccupation with one’s physical appearance and attributes (body shape, size, height, weight, and so on)” (pp. 20–21). People at the high end of Image Fixation Syndrome are called High Image Fixators. High Image Fixators engage in a variety of the following behaviors: “chronic dieting, yo-yo dieting, excessive exercise, excessive shopping, excessive appearance-checking, constant self-improvement, plastic surgery, weighing self once or several times a day, avoidance of social events that emphasize looks or bodies, reliance on fashion to soothe, and endless monitoring of body and appearance” (Richmond & McCroskey, 2004, p. 21). According to Richmond and Valencic (2000), image fixation is extremely detrimental to human communication because High Image Fixators are so obsessed with their outward façade they cannot engage in normal interactive patterns.

In a study conducted by Wrench and Valencic (2005), examining the relationship between communication apprehension and body dysmorphia, the researchers noted the psychiatric term “body dysmorphia” and the term used by Richmond and McCroskey (2004) “image fixation” are highly similar constructs. Wrench (2001) defined “body dysmorphia” as an inaccurate, unrealistic, and pathological appraisal of one’s physical appearance. According to the American Psychiatric Association (1994) in the *DSM-IV*, in order for an individual to be truly classified as having body dysmorphic disorder, they must experience significant distress and impairment that affects her or his ability to function in social, occupational, and/or other important areas of normal functioning.

Clinically speaking, body dysmorphic disorder has been linked to a number of psychiatric pathologies: depression (Phillips, 2005), obsessive

compulsive disorder (Phillips, Gunderson, Mallya, McElroy, & Carter, 1998), social phobia (Phillips, 2005; Veale, Kinderman, Riley, & Lambrou, 2003), lowered self-esteem (Phillips, 2005), suicide attempts (Phillips, 2005), and communication apprehension (Wrench & Valencic, 2005). People suffering from body dysmorphic disorder are more likely to take illegal drugs (Phillips & Diaz, 1997) and over-the-counter aids to help them alter their body (Muller, Dennis, Schneider, & Joyner, 2004). Overall, image fixation occurs when people become overly focused on the nonverbal messages they are sending to other people based on their physical appearance. Often people who are High Image Fixators overestimate how negative these nonverbally communicated messages actually are (Richmond & McCroskey, 2004; Richmond & Valencic, 2000).

### *Antifat Attitudes*

The word “fat” conjures many images in the mind of receivers in the United States. As Crandall (1994) noted, “the words *fat* and *antifat* were chosen because they are descriptive and because they do not imply a medical condition (e.g., *obese*), nor do they refer to some normative standard that may be genetically determined (e.g., *overweight*). The term *fat* is not used in a pejorative sense” [emphasis in original] (p. 882). In essence, researchers studying the psychological impact of non-idealized body weights in society have co-opted the term “fat” for use in studying the phenomenon in the same way the National Association to Advance Fat Acceptance (NAAFA) has co-opted the once pejorative term “fat.”

While the investigation of antifat attitudes has occurred since the early 1990s, a wealth of research has been accumulated looking at the effects of being overweight within the United States. Goldfield and Chrisler (1995) found overweight first graders were less likely to have friends than their average weight counterparts. Similarly, Rothblum, Brand, Miller, and Oetjen (1990) found fat adolescents were more likely to have been victims of bullying than their average weight counterparts; fat people were less likely to be accepted at elite colleges than their average weight counterparts; and fat people were more likely to report serious workplace harassment. Studies have also shown fat people to be perceived as indecisive, disorganized, nonindustrious, and incompetent (Larkin & Pines, 1979); and fat people are also thought to be self-indulgent, lazier, and less self-disciplined (Tiggemann & Rothblum, 1988). According to Robinson, Bacon, and Reilly (1993) “fat-phobia” beliefs fall into six general beliefs: fat people

are undisciplined/inactive/unappealing, fat people are grouchy/unfriendly, fat people have poor hygiene, fat people are passive, fat people have more emotional/psychological problems, and fat people are stupid/uncreative. As a whole, fat people have been found to be denigrated by average weight people, health care workers, employers, peers, their families, potential romantic partners, actual romantic partners, and themselves (Allon, 1982; Atkins, 1998; Crandall & Biernat, 1990; Harris, Harris, & Bochner, 1982; Millman, 1980; Morrison & O'Connor, 1999).

With a wealth of evidence to demonstrate the impact of antifat attitudes in the United States, Crandall (1994) created a 13-item Likert scale<sup>2</sup> to measure antifat attitudes. Crandall's scale can be broken in to three basic factors: dislike of fat people, fear of fat, and perceptions of individual willpower over weight. The dislike of fat people factor examines the extent to which an individual does not like fat people. The fear of fat factor is a personal score for a participant that examines her or his fear he or she could get fat. Lastly, willpower examines the belief an individual's weight is a matter of personal control. Crandall believed, "attitudes with a symbolic basis are characterized by the expression of beliefs and values relevant to self and identity. Based in early childhood learning, they represent long-standing values about society, are affectively laden, and can be independent of self-interest" (p. 882). In essence, children learn antifat attitudes in way similar to how children learn racist, homonegative, ageist, sexist, and ablest attitudes as well. In the first study, Crandall found men scored higher on dislike of fat people and slightly higher on beliefs of personal willpower to control one's weight, while women scored higher on fear of fat. There was also a positive relationship between dislike of fat people and beliefs of personal willpower to control one's weight. In the second study, Crandall found a series of positive relationships between an individual's ideology (racism, authoritarianism, and political conservatism) and antifat attitudes.

In a follow up to Crandall's (1994) research, Morrison and O'Connor (1999) developed the Antifat Attitudes Scale (negative attitudes toward overweight individuals) and the Dislike for Fat People (measure of pejorative beliefs about fat people) scales. One of the major problems Morrison and O'Connor noted about Crandall's scale was the three factors (dislike of fat people, fear of fat, and willpower) were drastically different concepts not necessarily related to antifat attitudes. In their first study, Morrison and O'Connor found antifat attitudes were positively related to right-wing authoritarianism, homonegativity, and conservatism. In the second study, the researchers did not find a relationship between antifat

attitudes and fear of fat. In their third study, the researchers noted men had more antifat attitudes than women. In the fourth and final study, people with high body mass indexes (BMI; over 25) had lower antifat attitudes than people with low BMI (below 25).

While antifat attitudes have not been specifically studied within the bisexual, gay, lesbian coculture, there have been limited writings discussing the effects antifat attitudes have on gay, bisexual, and lesbian individuals. In his personal essay, "A Matter of Size," Giles (1990) explains what it is like to be a 6'3", 315 pound male living within the gay community, "One night during a protest of a local club's no-Blacks door policy, the bouncer panicked and let the Double A's [African-Americans] in—then held me back. 'No whales in here,' he sneered, and when I objected, he punched me out" (p. 355). The openness to which people in the gay community often feel they can belittle and deride overweight gay men is similar to how BGL people are often belittled and derided by antigay right-wing authoritarians. Overall, Giles' comments about the gay community are very reminiscent of Crandall's (1994) beliefs that antifat attitudes are a form of culturally learned discrimination. Blotcher (1991) put the problem of antifat attitudes in the BGL community this way: "Obsessed as they are, these people know the score. In our queer community, appearance counts. If you're looking for compassion or justice, try another culture . . . Chubby, fat, and obese queers register for outcast status. . . . We are a community that has given its approval to a culture of body fascism" (p. 359).

### ***Sociocommunicative Orientation***

Using Sandra Bem's (1974) Sex-Role Inventory as a model, Richmond and McCroskey (1985) developed a scale to measure assertiveness and responsiveness, or an individual's sociocommunicative orientation. According to Richmond and Martin (1998), assertive communicators "are able to initiate, maintain, and terminate conversations, according to their interpersonal goals" (p. 136). The 10 items used by Richmond and McCroskey (1985) to measure assertiveness are: defends own beliefs, independent, forceful, has strong personality, assertive, dominant, willing to take a stand, acts as a leader, aggressive, and competitive. Conversely, responsiveness refers to an individual who "considers other's feelings, listens to what others have to say, and recognizes the needs of others" (Richmond & Martin, 1998). The 10 items used by Richmond and McCroskey to measure responsiveness are: helpful, responsive to others,

sympathetic, compassionate, sensitive to the needs of others, sincere, gentle, warm, tender, and friendly.

In a study conducted by Wrench (2005), the researcher examined the relationships among sociocommunicative orientation, ethnocentrism, and homonegativity. While ethnocentrism and homonegativity were strongly, positively related constructs, only homonegativity showed a small positive relationship with assertiveness. Both ethnocentrism and homonegativity were moderately, negatively related to responsiveness. In other words, the more someone considers other's feelings, listens to what others have to say, and recognizes the needs of others, the less likely he or she will be ethnocentric or homonegative. If antifat attitudes function in a similar way to ethnocentrism and homonegativity as discussed by Crandall (1994), the same relationship patterns with sociocommunicative orientation may be seen in this study.

### **RATIONALE**

The goal of this study is to understand how perceptions of physical appearance affect individuals within the bisexual, gay, and lesbian community. The literature review has identified a series of variables in order to better understand the effects of nonverbal perceptions of physical appearance on an individual's self-esteem, level of depression, and interaction and involvement within the BGL community. Furthermore, this study seeks to examine the relationship between sociocommunicative orientation and perceptions of physical appearance. Last, the study examines the differences between females and males with regard to the above mentioned variables.

Research examining image fixation has found individuals who suffer from image fixation syndrome (IFS) tend to be obsessively self-conscious, and participate in a wide variety of dieting and other body-modification behaviors (Richmond & McCroskey, 2004). Robinson, Bacon, and Reilly (1993) originally conceptualized "fat phobia" as a pathological fear of gaining weight that gets manifested in negative stereotyping of fat people. If antifat attitudes or dislike of fat people is measuring pejorative views of fat people stemming out of a phobia, then the phobia would be stemming out a neurotic state, which has been shown to be linked to lowered self-esteem (Beatty, McCroskey, & Valencic, 2001). Furthermore, Williamson and Hartley (1998) noted negative body image was negatively related to an individual's self-esteem. Previous research has also found a positive

relationship between dislike of fat people and willpower or an internal weight locus of control (Crandall, 1994), Nir and Neumann (1991) found individuals with an internal weight locus of control (individuals believe that they have the ability to control their own weights) had higher levels of self-esteem. Saltzer (1982) further noted individuals with an external weight locus of control (individuals believe that weight is a matter of genetics or other uncontrollable forces) had higher BMIs and were less likely to complete weight loss programs. Lastly, as noted by Atkins (1998) people who are overweight within the BGL community are stigmatized and often have lower self-esteem, which is noted in the high incidence of eating disorders among gay men (Russell & Keel, 2002). Ultimately, the issue of discrimination based on one's physical appearance or one's weight is clearly a problem within the gay community (Giles, 1990). If BGL people feel they are stigmatized and ostracized from their peers based on their physical appearance or weight, the negative effect on their self-esteem is likely (Atkins, 1998). Based on these findings, the following hypothesis is proposed:

H1: There will be a relationship between the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) and self-esteem.

In addition to self-esteem, the nonverbal variables should also be related to an individual's level of depression because self-esteem and depression are negatively related constructs (APA, 1994); therefore, the following hypothesis is posed:

H2: There will be a relationship between the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) and an individual's level of depression.

Research has indicated people who suffer from image fixation remove themselves from normal interactions with other people (Phillips, 2005; Richmond & McCroskey, 2004; Richmond & Valencic, 2000; Wrench & Valencic, 2005). If gay men and lesbians suffer from image fixation syndrome, it is possible they will show decreased levels of interacting within the BGL community. Furthermore, it has been posited one of the reasons researchers have found increased levels of body dissatisfaction

among gay men and increased body satisfaction among lesbians is a result of socialization within the gay and lesbian community (Morrison, Morrison, & Sager, 2004). If socialization within the gay community impacts eating disorders, it is possible socialization will affect antifat attitudes, dislike of fat people, and weight locus of control levels as well. In essence, the more someone becomes involved in the BGL community, the more he or she will perceive other BGL people can control their own weight and therefore be more critical of fat BGL people. According to Wright (1997, 2000), however, many people within the BGL community who are overweight have been able to find a safe haven within the BGL community that is very size accepting.

However, as noted by Giles (1990) and Blotcher (1998), an individual's physical appearance and weight within the GLB community can be openly discriminated against, and less attractive and heavier people can be denied entrance to BGL clubs, bars, and other social contexts. While these discriminatory behaviors are more likely to occur in gay male social venues (Blotcher, 1998), discrimination in the lesbian community also exists (Atkins, 1998). To understand more about the relationship between nonverbal physical appearance and interaction and involvement within the BGL community, the following research question was posed:

RQ1: What is the relationship between the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) and an individual's level of interaction and involvement within the bisexual, gay, and lesbian community?

As of yet, there is no research examining the relationship between an individual's sociocommunicative orientation (assertiveness and responsiveness) and perceptions of nonverbal physical appearance. With respect to image fixation, it is possible individuals who communicate in highly assertive manners will be more prone to take action in their lives rather than fixate on their physical appearances. Accordingly, people who communicate in highly responsive interaction patterns may be more empathetic to themselves and others (Richmond & Martin, 1998), which could cause the highly responsive individual to be less worried about any perceived physical imperfections. These theoretical jumps, however, cannot be substantiated by the existing research. As for research examining antifat attitudes, previous research examining ethnocentrism and homonegativity by Wrench (2005) found responsiveness was negatively

related to both ethnocentrism and homonegativity, while only homonegativity was positively related to assertiveness. If antifat attitudes or an individual's dislike of fat people is a prejudicial stance akin to racism as noted by Crandall (1994), then the same relationship patterns may be found between assertiveness and responsiveness with antifat attitudes or an individual's dislike of fat people, which would be a positive relationship with assertiveness and a negative relationship with responsiveness. Furthermore, a positive relationship with assertiveness and a negative relationship with responsiveness should also be found with weight locus of control, because of the positive relationship between weight locus of control and dislike for fat people (Crandall, 1994). Ultimately, previous research examining the relationship between an individual's sociocommunicative orientation and perceptions of physical appearance raises more questions than it provides answers; therefore, the following research question was posed:

RQ2: What is the relationship between sociocommunicative orientation (assertiveness and responsiveness) and the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI)?

Previous research outside the BGL community has found numerous differences between females and males: females have lower self-esteems (Atkins, 1998; Phillips, 2005), females are more likely to suffer from depression (Atkins, 1998; Phillips, 2005), males are more assertive (Thompson, Ishii, & Klopff, 1990; Wrench, 2005), females are more responsive (Anderson, Martin, Zhong, & West, 1997; Christophel, 1996; Thompson, Ishii, & Klopff, 1990; Wrench, 2005), females have higher image fixation levels (Phillips, 2005; Wrench & Valencic, 2005), males have higher antifat attitudes (Crandall, 1994; Morrison, Morrison, & Sager, 2004), males have higher levels of dislike of fat people (Crandall, 1994; Morrison, Morrison, & Cheryl, 2004), and males have higher internal weight locus of controls (Crandall, 1994; Saltzer, 1982). The question remains, then, with the above patterns of differences be found between gay/bisexual men and lesbian/bisexual women? To learn more, the following research question was posed:

RQ3: Are there differences between gay and bisexual males and gay and bisexual females on the variables examined within this study?

## METHOD

### *Procedures*

The goal of this study was to examine how physical appearance impacts an individual's connection to the gay, lesbian, and bisexual community. To recruit participants for this study, a series of e-mails were sent out to listservs that specifically target gay men, lesbians, and bisexuals asking for their participation in the study. Online surveys were utilized in this study because research has shown utilizing online samples enables researchers to get adequate sample sizes from non-college age participants (Dillman, 2000). Potential participants were informed in this e-mail that the lead author was "currently conducting a study examining perceptions of physical appearance function in the gay and lesbian community." Participants were then provided with a link to a Web page where the survey was being housed. Once on the survey Web site, participants were greeted with a standard institutional review board consent letter and were told clicking on the "START SURVEY" button at the bottom of the page indicated consent. If a participant clicked on the button, he or she was taken to the survey.

### *Participants*

This study consisted of 233 participants, which included 81 females (34.8%), 138 males (59.2%), 10 female-to-male (FtM) transsexuals (4.3%), and 4 who did not identify her or his biological sex. Participants were also asked to identify their sexual orientation to make sure our results were accurate: 195 (83.7%) were gay or lesbian, 31 (13.3) were bisexual, and 2 (.9%) indicated they were heterosexual, and were thus excluded from the study. Overall, the sample was ethnically homogenous with 205 (88%) of the participants being Anglo Saxon/Caucasian. The overall mean age for the sample was 35.63 ( $SD = 10.94$ ) with a range from 18 to 77. A one-way ANOVA was calculated to see if the females ( $M = 33.59$ ,  $SD = 9.77$ ) males ( $M = 37.03$ ,  $SD = 11.51$ ) differed in age,  $F(1, 216) = 5.04$ ,  $p < .05$ ,  $\eta^2 = .02$ . Overall, this indicates while there is a significant difference between the ages of the men and women in this study, the  $\eta^2$  indicates the difference is very small. However, age should be used as a co-variate when examining differences to make sure it is not a contributing factor to differences seen in this study.

Next, participants were asked to disclose their height in feet and inches, which was then converted to inches by the researchers. The mean

height for the sample was 68.61 ( $SD = 4.05$ ). Weight for the study participants was reported in pounds, and the mean weight for the sample was 189 ( $SD = 56.66$ ). For comparison purposes later in this study, the researchers converted height and weight into BMI using the formula: body mass (kg)/(height \* height in meters). The mean BMI in this study was 28.22 ( $SD = 7.88$ ). Using standard medical categories (Patient Notes, 2005), the study sample consisted of 4 (1.7%) people who were underweight (BMI less than 18.5); 80 (34.3%) people who were at healthy weights (BMI between 18.5 and 24.9); 67 (28.8%), and people who were overweight (BMI between 25 and 29.9); 73 (31.3%) people who were obese (BMI over 30).

## ***Instrumentation***

### *Image Fixation Questionnaire*

The Image Fixation Questionnaire was created by Richmond and McCroskey (2004) to examine the degree to which an individual is overly critical and fixated on her or his body. The scale consists of 20 statements measured using a Likert-type scale ranging from 1 *strongly disagree* to 5 *strongly agree*. The alpha reliability obtained in this study was .89 ( $M = 50.21$ ,  $SD = 12.53$ ).

### *Physical Discrimination Scale*

The Physical Discrimination Scale is a retooling of McCroskey's (1966) Generalized Belief Measure. The Generalized Belief Measure was created as a way to measure beliefs about specific concepts. By attaining an individual's general belief about a given topic, the researcher can measure the degree to which an individual believes in a given statement. The two parts of the Physical Discrimination Scale are spread throughout the questionnaire instrument to prevent non-real relationships from occurring. Each belief statement is then measured using a 5-item semantic differential scale (agree/disagree, false/true, incorrect/correct, right/wrong, and yes/no) with seven steps. The Physical Discrimination Scale uses the Generalized Belief Measure to measure two possible beliefs: I have been discriminated against in the gay/lesbian community because of my physical appearance,  $\alpha = .97$  ( $M = 20.67$ ,  $SD = 9.94$ ); and I have been discriminated against in the gay/lesbian community because of my weight,  $\alpha = .98$  ( $M = 17.63$ ,  $SD = 10.72$ ).

### *Antifat Scale*

The Antifat Scale was created by Morrison and O'Connor (1999) to measure an individual's negative perceptions of overweight people. The original scale consists of 12 Likert type items ranging from 1 *strongly disagree* to 5 *strongly agree*. The original scale only had items negatively worded against overweight individuals. For this reason, 12 positively worded items were added (total of 24 items) in an attempt to better differentiate individuals' perceptions about overweight individuals.<sup>3</sup> The scale is broken into two factors, the first factor consists of 12 items and measures general antifat attitudes and received an alpha reliability of .85 ( $M = 25.54$ ,  $SD = 7.05$ ). The second factor consists of 12 items and measures general antifat attitudes and received an alpha reliability of .86 ( $M = 24.22$ ,  $SD = 7.31$ ).

### *Weight Locus of Control Scale*

The Weight Locus of Control Scale was developed by Wrench (2004) to determine whether people have an internal or external locus of control. The scale consists of eight items Likert-type items ranging from 1 *strongly disagree* to 5 *strongly agree*. The original scale has not undergone a factor analysis, so this study put the ten item scale through a principal component analysis (see Table 1 for loadings). The alpha reliability obtained for the measure was .81 ( $M = 19.61$ ,  $SD = 5.09$ ). Higher scores on the Weight Locus of Control Scale represent beliefs one's weight is a matter of luck (external locus of control), and lower scores represent perceptions of individual control over weight (internal locus of control).

TABLE 1. Weight locus of control scale

|   | Factor <sup>1</sup> |
|---|---------------------|
| 1. Being the ideal weight is a matter of luck.  | .74                 |
| 2. My weight is caused by my genetics, not by anything I do.  | .70                 |
| 3. If I exercise and eat right I can maintain/attain my ideal weight.                                   | -.71                |
| 4. A thin body is a result of lucky genetics.   | .61                 |
| 5. My weight is what I made of it.  | -.57                |
| 6. No matter how much effort one puts into diet and exercise, her or his weight tends to stay the same. | .75                 |
| 7. Being overweight is a matter of choice.  | -.47                |
| 8. I have the ability to control my weight.   | -.69                |

Principle Component Analysis.

<sup>1</sup>Eigenvalue accounted for 45% of the variance.

### *Identification and Involvement Within the Gay Community Scale*

The Identification and Involvement with the Gay Community Scale was created Stokes, McKiran, and Burzette (1993) to examine the degree to which an individual was actively involved in the gay community. The scale consists of four Likert-type questions measured on a 5-point scale from 1 *strongly disagree* to 5 *strongly agree*, and four multiple choice questions asking about specific behaviors (reading literature, attending activities, going to a gay bar, or having gay and lesbian friends) and the degree to which individuals participate in these behaviors. The alpha reliabilities for this scale was .70 ( $M = 25.74$ ,  $SD = 5.00$ ).

### *Rosenberg Self-Esteem Questionnaire*

The Rosenberg Self-Esteem Questionnaire was created by Rosenberg (1965) to examine an individual's positive perceptions of her or himself. The version utilized in this study is the shortened version utilized and tested by Vincke and van Herringen (2004). The scale consists of 6 statements measured using a Likert-type scale ranging from 1 *strongly disagree* to 5 *strongly agree*. The alpha reliability obtained in this study was .80 ( $M = 23.85$ ,  $SD = 3.89$ ).

### *Depression Subscale*

To analyze an individual's level of depression in this study, the depression subscale from Goldberg's (1972) General Health Questionnaire was utilized. The Depression Subscale consists of five statements measured using a Likert-type scale ranging from 1 *not at all* to 4 *much more than usual*. The alpha reliability obtained in this study was .88 ( $M = 8.56$ ,  $SD = 3.92$ ).

### *Sociocommunicative Orientation Scale*

The Sociocommunicative Orientation scale was created by Richmond and McCroskey (1985) to examine the extent to which individuals use assertive or responsive communication. The scale consists of 10 items on each factor for a total of 20 items. Participants are asked to respond to short descriptive phrases to indicate ways in which they may communicate. The measure asks a participant to respond in terms of how well the items applies to her or him using a Likert scale from 1 *strongly disagree that it applies* to 5 *strongly agree that it applies*. The alpha reliability for responsiveness in this study was .82 ( $M = 42.71$ ,

$SD = 5.02$ ), and the alpha reliability for assertiveness in this study was .81 ( $M = 36.05$ ,  $SD = 6.48$ ).

## RESULTS

The first hypothesis predicted there would be a relationship between the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) and self-esteem. Before analyzing this hypothesis, a series of Pearson Product Moment Correlations were calculated for the Nonverbal Physical Appearance Variables (Table 2). To analyze this first research question, a series of Pearson product-moment correlations were calculated between the nonverbal physical appearance variables and self-esteem (Table 3). To further understand the relationships seen in this hypothesis, a multiple linear regression was calculated using the physical appearance variables as the independent variables and self esteem as the dependent variable,  $F(7, 163) = 10.76$ ,  $p < .0005$ . The sample multiple correlation coefficient,  $R$ , was .56, which indicates approximately 32% of the variance of an individual's self-esteem could be accounted for by the linear combination of the independent variables. However, only Image Fixation ( $t = -5.99$ ,  $p < .0005$ ,  $\beta = -.47$ ) and Dislike of Fat People ( $t = -2.32$ ,  $p < .02$ ,  $\beta = -.18$ ) accounted for any of the unique variance in an individual's self-esteem. This hypothesis was supported and indicates the more someone is fixated on her or his image and the more he or she dislikes fat people, the lower her or his self-esteem will be.

TABLE 2. Physical appearance correlations

|                         | Image fixation | Antifat attitudes | Dislike of fat people | Weight locus of control | Physical discrimination | Weight discrimination |
|-------------------------|----------------|-------------------|-----------------------|-------------------------|-------------------------|-----------------------|
| Image fixation          |                |                   |                       |                         |                         |                       |
| Antifat attitudes       | .24***         |                   |                       |                         |                         |                       |
| Dislike of fat people   | .09            | .53***            |                       |                         |                         |                       |
| Weight locus of control | -.10           | .20***            | -.07                  |                         |                         |                       |
| Physical discrimination | .44***         | .09               | .03                   | -.10                    |                         |                       |
| Weight discrimination   | .47***         | .08               | .04                   | -.07                    | .62***                  |                       |
| Body massindex          | .23**          | -.24***           | -.17*                 | -.28***                 | .29***                  | .51***                |

\* $p < .05$ , \*\* $p < .005$ , \*\*\* $p < .0005$ .

TABLE 3. Dependent variable correlations

|                         | Self-esteem | Depression | Interaction and involvement | Assertiveness | Responsiveness |
|-------------------------|-------------|------------|-----------------------------|---------------|----------------|
| Image fixation          | -.53***     | .51***     | -.08                        | -.11          | -.02           |
| Antifat attitudes       | -.19**      | .06        | -.16*                       | -.18*         | -.25***        |
| Dislike of fat people   | -.21**      | .05        | -.19*                       | -.16*         | -.27***        |
| Weight locus of control | .21**       | -.17*      | .04                         | .02           | .13            |
| Physical discrimination | -.33***     | .32***     | -.19*                       | .00           | -.12           |
| Weight discrimination   | .20**       | .20**      | -.12                        | .04           | -.20**         |
| Body massindex          | -.06        | .15*       | .00                         | .06           | -.03           |

\* $p < .05$ , \*\* $p < .005$ , \*\*\* $p < .0005$ .

The second hypothesis predicted there would be a relationship between the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) and depression. A series of Pearson Product Moment Correlations were calculated between the nonverbal physical appearance variables and an individual's level of depression (Table 3). To further understand the relationships seen in this hypothesis, a multiple linear regression was calculated using the physical appearance variables as the independent variables and depression as the dependent variable,  $F(7, 163) = 8.60, p < .0005$ . The sample multiple correlation coefficient,  $R$ , was .52, which indicates approximately 27% of the variance of an individual's level of depression could be accounted for by the linear combination of the independent variables. However, only Image Fixation ( $t = 6.11, p < .0005, \beta = .50$ ) accounted for any of the unique variance in an individual's level of depression. In essence, the more someone is fixated on her or his image, they more depressed that person will be.

The first research question examined the relationship between the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) and an individual's level of participation within the gay and lesbian community. A series of Pearson product-moment correlations were calculated between the nonverbal physical appearance variables and an individual's level of participation within the gay and lesbian community (Table 3). To further understand the relationships seen in this hypothesis, a multiple linear regression was calculated using the physical appearance variables as the independent variables and an individual's level of participation within the gay and lesbian community as the dependent variable, which was not significant  $F(7, 159) = 2.06, p > .05$ . Overall, this finding indicates none of the physical image variables examined in this study (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) related to whether or not an individual saw her or himself as actively involved in the gay and lesbian community.

The second research question examined the relationships between sociocommunicative orientation (assertiveness and responsiveness) and the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI). A series of Pearson product-moment correlations were calculated between the nonverbal physical appearance variables and sociocommunicative orientation (Table 3). To further understand the relationships seen in this hypothesis, a canonical correlation was calculated

TABLE 4. Canonical loadings for sociocommunicative orientation

| Variable                       | Variate one | Variate two |
|--------------------------------|-------------|-------------|
| Sociocommunicative orientation |             |             |
| Assertiveness                  | -.56        | -.85        |
| Responsiveness                 | -.85        | .56         |
| Nonverbal physical appearance  |             |             |
| Image fixation                 | .08         | .74         |
| Antifat attitudes              | .46         | .00         |
| Dislike of fat people          | .62         | .13         |
| Weight locus of control        | -.32        | .14         |
| Physical discrimination        | -.09        | -.36        |
| Weight discrimination          | .11         | -.97        |
| Body mass index                | .14         | .16         |

using the sociocommunicative orientation as the predictors of the nonverbal physical appearance variables. Using Wilks'  $\lambda$ , the overall model was significant, Wilks'  $\lambda = .78$ ,  $F(14, 314) = 2.98$ ,  $p < .0005$ , which indicates the two variates are significantly associated by the canonical correlation. Both canonical correlations were found to be significant in this study: Canonical Correlation 1, Wilks'  $\lambda = .78$ ,  $F(14, 314) = 2.98$ ,  $p < .0005$ ; and Canonical Correlation 2, Wilks'  $\lambda = .92$ ,  $F(6, 158) = 3.10$ ,  $p < .05$ . The first variate accounted for approximately 15% of the variance in the dependent variable (canonical correlation = .39), and the second variate accounted for approximately 8.4% of the variance in the dependent variable (canonical correlation = .29). The exact canonical loadings for each variable can be seen in Table 4.

The final research question examined differences between males and females on the variables examined within this study. To examine the study variables, a series of one-way ANCOVAs were calculated using age as the covariate since the females and males in this sample differed in age. Also, FtM transsexuals were not included in this analysis since there were only 10 participants who fell into this category. The results from this hypothesis can be seen in Table 5.

## DISCUSSION

The results from this study can be broken down into relationships among the study variables and the differences seen on the study variables between gay/ bisexual men and lesbian/bisexual women. This section will examine

TABLE 5. ANCOVA results

| Variable names                                     | Biological sex | N   | M     | SD    | df       | F     | Sig.  | $\eta^2$ |
|--|----------------|-----|-------|-------|----------|-------|-------|----------|
| Image fixation                                     | Females        | 77  | 45.82 | 10.88 | (1, 205) | 15.48 | .0005 | .07      |
|  | Males          | 131 | 52.93 | 12.97 |          |       |       |          |
| Antifat attitudes                                  | Females        | 77  | 22.05 | 6.01  | (1, 210) | 44.49 | .0005 | .18      |
|  | Males          | 136 | 28.22 | 6.60  |          |       |       |          |
| Dislike of fat people                              | Females        | 75  | 22.71 | 7.16  | (1, 204) | 4.18  | .05   | .02      |
|  | Males          | 132 | 25.06 | 7.32  |          |       |       |          |
| Weight locus of control                            | Females        | 78  | 27.23 | 5.31  | (1, 209) | 7.99  | .005  | .04      |
|  | Males          | 134 | 29.16 | 4.80  |          |       |       |          |
| Physical discrimination                            | Females        | 71  | 17.15 | 10.29 | (1, 197) | 13.95 | .0005 | .07      |
|  | Males          | 129 | 22.52 | 9.48  |          |       |       |          |
| Weight discrimination                              | Females        | 72  | 13.89 | 9.35  | (1, 193) | 15.84 | .0005 | .08      |
|  | Males          | 124 | 20.19 | 10.95 |          |       |       |          |
| Body mass index                                    | Females        | 78  | 28.70 | 8.54  | (1, 211) | 0.52  | .474  | .00      |
|  | Males          | 136 | 28.24 | 7.36  |          |       |       |          |
| Assertiveness                                      | Females        | 78  | 36.81 | 5.86  | (1, 211) | 1.70  | .194  | .00      |
|  | Males          | 136 | 35.51 | 6.81  |          |       |       |          |
| Responsiveness                                     | Females        | 78  | 43.36 | 5.02  | (1, 209) | 2.38  | .125  | .01      |
|  | Males          | 134 | 42.40 | 5.00  |          |       |       |          |
| Self-esteem  | Females        | 78  | 25.01 | 3.59  | (1, 211) | 11.42 | .001  | .05      |
|  | Males          | 136 | 23.25 | 3.87  |          |       |       |          |
| Depression   | Females        | 79  | 7.89  | 3.43  | (1, 211) | 3.43  | .066  | .02      |
|  | Males          | 135 | 8.84  | 4.09  |          |       |       |          |
| Involvement and interaction with the BGL community | Females        | 76  | 27.00 | 3.98  | (1, 205) | 10.97 | .001  | .05      |
|  | Males          | 135 | 24.97 | 5.35  |          |       |       |          |

these two general groups of results separately and will be followed by a description of limitations to the study and directions for future research.

### ***Relationship Results***

The relationship results examined in this study can be best understood by examining the four dependent variables: self-esteem, depression, involvement in the BGL community, and sociocommunicative orientation. For this reason, the following discussion will examine each of these four dependent variables separately.

#### ***Self-Esteem***

The first hypothesis in this study predicted a relationship between the nonverbal physical appearance variables (image fixation, antifat attitudes,

dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) and self-esteem. However, results indicated only image fixation and dislike of fat people were negatively related to an individual's self-esteem. All of the nonverbal physical appearance variables correlated significantly with self-esteem except BMI. However, the linear regression indicated image fixation and dislike of fat people accounted for approximately 32% of the variance in an individual's self-esteem. In essence, people who are highly fixated on their physical appearance and people who have an open dislike of fat people have lower self-esteem. One theoretical reason for why image fixation is a better predictor of self-esteem could be because image fixation may be a latent variable underlying the other nonverbal physical appearance variables. The idea that image fixation underlies most problems related to physical appearance is clearly supported in the original conceptualization of image fixation by Richmond and Valencic (2000). While image fixation can help explain why antifat attitudes, weight locus of control, physical appearance discrimination, weight discrimination, and BMI did not account for any of the unique variance in an individual's self-esteem, image fixation was not related to dislike of fat people, so further explanatory reasoning is needed to ascertain why dislike of fat people accounts for unique variance in self-esteem. Since dislike of fat people is seen as a pejorative stance against fat people (Crandall, 1994), "dislike of fat people" might be measuring some of the underlying notions of "fat phobia" originally discussed by Robinson, Bacon, and Reilly (1993), which is clearly based on stereotypical assumptions about fat people (e.g., undisciplined, grouchy, poor-hygiene, stupid, uncreative, psychologically unbalanced, etc.). These stereotypical assumptions have been used to describe various out-groups in prejudice research (Allport, 1954).

### *Depression*

The second hypothesis predicted the relationships among depression and the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI) would be the exact opposite of the self-esteem results because of the previously found inverse nature between self-esteem and depression (APA, 1994). Overall, the results indicated there was a strong, positive relationship between how fixated a person is on her or his physical appearance and how depressed that person is. More specifically, depression was positively related to image fixation, physical

discrimination, weight discrimination, and body mass index. Furthermore, depression was negatively related to weight locus of control (the more one feels in control of one's weight, the less depressed he or she is), but was not related to either antifat attitudes or dislike of fat people. In the regression analysis, image fixation accounted for 27% of the variance in depression. Once again, the importance of Richmond and McCroskey's (2004) conceptualization of image fixation is seen in this result. The only variables that did not relate to depression were antifat attitudes and dislike of fat people. Since both of these constructs are based on an individual's perception of other people, the lack of a significant finding is explainable. Previous research conducted by Beatty, McCroskey, and Valencic (2001) found neuroticism and depression are positively related constructs; however, Wrench and McCroskey (2003) failed to find a relationship between neither ethnocentrism nor homophobia with neuroticism. Overall, it appears that while neuroticism may underlie an individual's level of depression, neuroticism does not account for an individual's bigoted ideology. In essence, antifat attitudes and dislike of gay people appear to be culturally learned constructs and not biological ones as suggested by Crandall (1994) and Robinson, Bacon, and Reilly (1993).

### *Involvement in the BGL Community*

The first research question examined the relationship between nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical appearance discrimination, weight discrimination, and BMI) and an individuals' interaction and involvement within the BG) community. Results indicated antifat attitudes, dislike of fat people, and perceptions of physical discrimination within the BGL community were all minimally, negatively related to interaction and involvement with the BGL community. The regression analysis, however, indicated there was not a significant linear relationship between the nonverbal physical appearance variables and interaction and involvement with the BGL community. This may be because many people within the BGL community who are not the "idealized" gay/bisexual men and lesbian/bisexual women have found support systems with other people who are similar to them (Atkins, 1998; Wright, 1997, 2000). While the mainstream gay community may clearly idealize the youthful, thin, White individual; people who do not fit into this stereotype have created their own niches because of the innate need to associate with other BGL people while forming a gay identity (Cass, 1979, 1984). Overall, the results

suggest that while many people feel discriminated against in the BGL community because of their physical appearance and/or weight, people are finding a sense of community and are actively involving themselves within BGL culture.

### *Sociocommunicative Orientation*

The second research question in this study examined the relationship between sociocommunicative orientation (assertiveness and responsiveness) and the nonverbal physical appearance variables (image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and BMI). The canonical correlation indicated both variates were significant. To understand the loadings on the two variates, Tabachnick and Fidell's (2001) cut off point for meaningfulness of a loaded variable on a variate is .30 will be used. On the first variate, assertiveness, responsiveness, and weight locus of control loaded negatively, and antifat attitudes and dislike of fat people loaded positively. In other words, people who are assertive communicators, responsive communicators, and possess an external weight locus of control (belief that someone's weight is genetically based or controlled by non-personal factors) are less likely to possess antifat attitudes and dislike fat people. While not causal in nature, there clearly appears to be a negative relationship between assertive and responsive communicative patterns and a person's tendency to harbor prejudicial feelings towards fat people, which is similar to the results of Wrench (2005) who found responsiveness was negatively related to both ethnocentrism and homonegativity.

As for the variables on the second variate, assertiveness, physical discrimination, and weight discrimination all loaded negatively while responsiveness and image fixation loaded positively. At first, these findings seem somewhat contradictory to the correlations in Table 3. While physical discrimination and weight discrimination are related to image fixation, the findings from the canonical correlation allows for a clearer understanding. People who are highly assertive communicators appear to be less likely to report discrimination as a result of their physical appearances and weight. At the same time, highly responsive people are more likely to be fixated on their physical appearances. One theoretical reason for this finding is that highly assertive people are less likely to be fixated on their physical appearances, and thus, less likely to report physical or weight based discrimination. However, the exact reasoning for the loadings on this variate are clearly on theoretical and future research should attempt to examine this further.

### *Differences Results*

To examine differences between females and males in this study, a series of ANCOVAs were calculated using "age" as a covariate since the males in this sample were older than the females. To examine these differences, a discussion of the non-significant findings will occur first. Body Mass Index and sociocommunicative orientation were shown in this study to be nondifferent. Essentially having equal BMI groups in this sample is a further indication the sample was fairly heterogeneous. Finding that females and males in this sample did not differ with respect to assertive and responsive communicative orientations is very interesting. Previous research with diverse international samples have noted females are more responsive and males are more assertive: Chinese (Anderson, Martin, Zhong, & West, 1997), Japan (Thompson, Klopff, & Ishii, 1990), Russian (Christophel, 1996), and United States (Anderson, Martin, Zhong, & West, 1997; Christophel, 1996; Thompson, Klopff, & Ishii, 1990; Wrench, 2005). In many ways, these results are similar to the findings Wrench (2002) had when examining the impact biological sex and sexual orientation had on verbal aggression, where straight men were more verbally aggressive than lesbians, straight women, or gay men. While direct comparisons with heterosexual participants on sociocommunicative orientation did not occur in this study, future research should more clearly examine this area for possible differences.

The picture that is painted with the rest of the differences between gay/bisexual men and lesbian/bisexual women indicates males are considerably more preoccupied with and affected by physical appearance. Males reported significantly higher levels of image fixation, antifat attitudes, dislike of fat people, weight locus of control (indicating internal loci), physical discrimination, weight discrimination, and depression. Females reported significantly higher levels of self-esteem and interaction and involvement within the BGL community. Overall, the results are mixed when compared with findings looking at presumably predominantly straight samples. While some of these results are consistent with previous research with straight samples (antifat attitudes, dislike of fat people, and weight locus of control) many of the results in this study see a reversal of what is generally seen in straight samples (image fixation, physical discrimination, weight discrimination, self-esteem, and depression), which clearly indicates the straight and BGL experiences with regards to these variables is different. Research has posited a number of theories attempting

to explain the increased incidence of body-image disorders among gay men: dysfunctional family roles and gender role disturbance (Fichter & Daser, 1987), sociocultural enculturation of gay men into the gay male community (Siever, 1994), effects of internalized homonegativity (Williamson & Hartley, 1998). Giles (1998) and Blotcher (1998) noted the gay community is very physical image focused because there is the underlying need and desire to be perceived as physically attractive by other members of the community. As for why lesbians are not more affected by physical appearance, it could be the influence of decades of feminist thinking and theorizing on the effects of the male influenced, heterosexist female body norms (Striegel-Moore, Tucker, & Hsu, 1990). The exact cause of this difference between gay/bisexual men and lesbian/bisexual women is clearly culturally based, but based on the current study's results the difference has nothing to do with the degree of involvement within the BGL culture. However, it is possible that while the degree of involvement does not impact people, the type of involvement may be a stronger indicator of the difference. For example, does attending a gay-inclusive church, going to a circuit party, and reading gay periodicals affect people the same way? Since many BGL communities have only one or two social outlets (usually bars and clubs), the over reliance of gay men on the bar/club culture, which is innately physical appearance oriented and highly sexualized (Blotcher, 1998), for gay identity formation could be one of the pervasive factors in the differences between gay men and lesbians' perceptions of body image. Clearly, this is an avenue which should be explored in future research.

### ***Limitations***

As with any research endeavor, this study does have a handful of limitations that need to be addressed. First, this sample was a nonrandom completely voluntary sample where individuals had to select into the study. Individuals were sent e-mails of invitation through newsgroups, listservs, and bulletin boards. Ultimately, the letter of invitation to participate in the study had to capture someone's attention and cause her or him to decide to participate in a study that took between 30 and 45 minutes to complete. There could be some form of systematic bias that cannot be measured in which people responded to the call to participate in the study.

A second limitation to the study has to do with the Internet itself. While using the Internet for researching hard to reach groups like BGL individuals

is useful, questions about the generalizability of the study must be considered. For the most part, low-income individuals and individuals in areas of the country without Internet service are probably excluded from this sample based on the data collection method employed.

A last limitation is the lack of bisexual participants in this study. The study only had 31 people who self-identified as bisexual (6 males and 35 females). Since the calls to participate were placed in highly gay/lesbian populated areas many bisexuals may have either not seen the call or seen it and did not think it applied to them. On the same line of thinking, the 10 FtM transsexual individuals who participated in this study ultimately were excluded from research examining sex differences to avoid making the results ambiguous.

### ***Future Research***

This study has examined a number of communicative phenomenon related to antifat perceptions people may have. As a construct, antifat attitudes have not been examined by nonverbal communication researchers as a negative nonverbal perception. While the effects of being fat in our society are clearly negative, being fat in our society affects fat peoples' interactions with other people should be further explored. Whether looking at student–teacher, subordinate–supervisor, or family interactions, being fat and antifat attitudes could be a variable impacting how interactions are actually carried out in those varying contexts.

A second major line of research for communication scholars is to examine how sexual orientation impacts human communication. The current study, which looked at sociocommunicative orientation, and the Wrench (2002) study, which examined verbal and physical aggression, demonstrate how an individual's sexual orientation impacts her or his communicative behavior. Only when more researchers use sexual orientation as a variable of interest in communication research, will communication researchers gain a more thorough understanding of how sexual orientation impacts communicative behavior.

Lastly, image fixation as a pathological nonverbal communicative behavior is clearly impacting a wide range of behaviors. While little research has attempted to flesh out Richmond and Valencic's (2000) construct, people who are overly particular about how to present themselves nonverbally to others through their physical appearance provide a unique way of understanding how people engage in self-presentational behaviors. While image fixation may be an extreme, understanding image fixation could help to understand more common aspects of nonverbal communication.

## CONCLUSION

As stated in the introduction, people's nonverbal communication is extremely important and how we present ourselves physically impacts how people relate to us (Richmond & McCroskey, 1994). The goal of this study was to initiate a dialogue about the influence and ramifications of antifat attitudes, image fixation, and discrimination based on physical appearance and weight on bisexual, gay, and lesbian people. The basic results from this study indicated Richmond and Valencic's (2000) conceptualization of image fixation, or the tendency to obsess about one's physical appearance, was negatively related to an individual's self-esteem and positively related to an individual's level of depression. Results also indicated people with highly assertive and responsive communicative behaviors were less likely to hold antifat attitudes and less likely to dislike fat people, which are similar to the results found by Wrench (2005) who examined sociocommunicative orientation with ethnocentrism and homonegativity. Lastly, this study examined sex comparisons analyzing the differences between lesbian/bisexual females and gay/bisexual males. The results indicate gay/bisexual males had significantly higher levels of image fixation, antifat attitudes, dislike of fat people, weight locus of control, physical/weight discrimination, and depression than lesbian/bisexual females. The results also indicated lesbian/bisexual females had significantly higher levels of self-esteem and interaction and involvement within the BGL community. Overall while tolerance and understanding never comes easy, hopefully research in this area can call attention to the lack of tolerance that still exists in the BGL Community against its own members than gay/bisexual men.

## NOTES

1. While research clearly notes that gay men tend to prefer thinner partners as a whole, there are many within the gay community that are attracted to and maintain sustained relationships with men of larger sizes. For a complete discussion of this unique gay male subculture, the writings of Wright (1997, 2000) will be very helpful.

2. A Likert scale is a scale where participants are presented with a number of statements and then participants are asked to respond to those statements based on a pre-existing scale (e.g., 1 *strong disagree* to 5 *strongly agree*).

3. To see the revised version of the Antifat Scale, please contact the lead author of this article.

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