

PERCEIVED ATTRACTIVENESS OF “SELF IDENTIFIED” BISEXUAL
INDIVIDUALS

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ABSTRACT

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Many factors affect how one selects a mate. Men and women both consider attractiveness to be an important characteristic in first impressions of potential mates. However, underlying factors determine how desirable an individual is perceived beyond the initial draw of physical attraction. This study investigated how heterosexual males and females differ in perceived attractiveness of bisexual individuals. Participants were recruited from psychology courses and were shown a series of photos of opposite sex models with a brief biographical profile for each subject. The participants completed a five factor model of personality measure, a sensation seeking personality measure, and a disgust measure. These measures were examined to determine which variables affect gender differences in perceived attractiveness of bisexual individuals. The study found that significant differences exist between attractiveness ratings of bisexual and heterosexual individuals; however, no significant differences were observed between male and female models. The personality traits and characteristics of openness to experience and sensation seeking were related to ratings of attractiveness of bisexual individuals.

INTRODUCTION

Bisexuality is a complex and dynamic facet of sexuality. Bisexuality is a contested category that undermines the ways people usually think about sexuality and gender (Klesse, 2005). Often heterosexual individuals may be engaging in sexual relationships with individuals who are engaging in sexual behaviors with members of both genders. People who are involved in sexual relationships with bisexual individuals, are at increased risk for contracting sexually transmitted diseases and HIV/AIDS (Wyatt, Williams, & Myers 2008; Myers et al., 2009).

Evolutionary theorists acknowledge that several strategies of mating exist. Buss (2007) listed long-term, short-term, and extra-pair mating strategies. Differences in the sexes are seen across the mating strategies. Buss theorizes that men are far more likely to desire casual sexual encounters than women. Furthermore, males desire sexually permissive partners in low commitment relationships and non-permissive partners in high commitment relationships (Oliver & Sedikides, 1992). If men are more sexually promiscuous, it is possible they would have an increased desire to engage in sexual relationships with bisexual females, perhaps in an effort to fulfill a male fantasy.

Physical attractiveness is important in a modern society that is heavily influenced by pop culture. Physical attractiveness makes for more positive social outcomes such as attracting more friends and higher dating frequencies (Feingold, 1992). Men find physical attractiveness to be more important when selecting a sexual partner, and women use physical attractiveness as an initial draw to a potential mate. The current study

examined if a bisexual identity affects an individual's perceptions of attractiveness of potential mates.

Sensation-seeking is a psychological characteristic in which individuals seek out a variety of experiences which are novel and intense (Zuckerman, 1994). These experiences are generally associated with increased risks. Zuckerman found that males tend to exhibit higher levels of sensation-seeking than females. Sensation seekers who engage in risky sexual behaviors are at a much greater risk of sexually transmitted diseases, HIV, and pregnancy (Donohew, Zimmerman, Cupp, Novak, Colon, & Abell, 2000). Individuals who possess a propensity for risky sexual practices are perhaps more likely to engage in sexual behaviors with individuals who are bisexual, whether the bisexual identity is known or not. This places sexual partners at risk.

Feelings of disgust are often associated with food or aversive stimuli; however, disgust is also associated with withdrawal from experiencing or thinking about offensive stimuli (Rozin, Haidt, McCauley, Dunlop, & Ashmore, 1999). The emotion of disgust is also a mediating factor of homophobia (Olatunji, 2008). These findings drive the current study which investigated heterosexual's perceptions of attractiveness of bisexual individuals.

Individuals differ greatly in their personalities. Personality traits are often measured by five factors (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) (McCrae & John, 1992). For this reason personality traits, including sensation-seeking, were investigated to see how perceptions of the attractiveness and interest in engaging in a sexual relationship with a bisexual individual are related to personality.

LITERATURE REVIEW

Bisexuality

The issue of sexual identity is not always as simple as identifying one's attraction to a member of the same or opposite sex. Bisexuality is a complex and dynamic facet of sexuality. The number of reported individuals with a bisexual identity in the United States population range from 10% to 80% (Garber, 2000). Bisexuality is a contested category that undermines the ways people typically think about sexuality and gender (Klesse, 2005). Petford (2003) defines bisexuality as "mutable sexual and emotional attraction to people of any sex, where gender may not be a defining factor". Petford reported that bisexuality has been disregarded from psychological literature. Over half of all psychology textbooks do not mention bisexuality as a sexual identity (Barker, 2007). Rather, they focus on dichotomous theories of sexuality.

The dichotomous model suggests that sexual identity is either heterosexual or homosexual (Barker, 2007). However, bisexuality deserves recognition (Fox, 2000). Theorists such as Kinsey posit that sexual identities follow along a continuum. Kinsey (1948) operationalized sexual identity by developing a seven point scale ranging from exclusively heterosexual to exclusively homosexual. Individuals of a bisexual identity fall between two and four on the Kinsey scale (Smith, Nolen-Hoeksema, & Fredrickson, 2002 as cited in Barker, 2007). Still, other theories view bisexuality as a transitional phase between a heterosexual identity to a homosexual identity. Social constructionists suggest that sexual identities are flexible and variable (Eliason & Shope, 2007). Some

homosexuals may label themselves as bisexual because they find it less stigmatizing while transitioning.

Bisexuality as a sexual identity has not been widely accepted. Stokes, Damon, and McKirnan (1997) studied self-proclaimed bisexual men. They found the men as a whole had moved more toward self-ratings of homosexual. This study suggests that many bisexual men eventually become exclusively homosexual. However, half of the participants remained stable in their bisexual identity.

Bem's (1996) developmental theory of sexual identity is sometimes called "*exotic becomes erotic*". This theory proposes that gender conformity and nonconformity in childhood is an antecedent to adult sexual identity. Bem found that 75% of gender nonconforming boys later became bisexual or homosexual. Further, Bem argued that individuals become erotically attracted to others who were dissimilar to them in their childhood. Bem refers to the Sambia culture in New Guinea where the boys are involved in homosexual relationships with elders until they reach sexual maturity. Interestingly, the majority of these boys mature into heterosexual males with only a few engaging in homosexual acts in adulthood. Bem proposes that sexual identity is indirectly influenced by biological factors. He acknowledges gene studies of twins that show higher concordance rates of homosexuality in monozygotic than dizygotic twins.

Many bisexual individuals hide their sexual identity. Malcolm (2000) studied married bisexual men in Australia. Roughly 75% of the respondents reported their wives had no knowledge of their homosexual desires prior to their marriage. Interestingly, 71% of those same respondents reported their wives currently know of their sexual interests in men. The bisexual men in his study reported their first homosexual feelings around the

age of 15 with their first homosexual contact around 19 compared to their first heterosexual contact at the age of 21. Although these bisexual men were married, their Kinsey scores reflect more homosexual feelings, which became greater after marriage.

Bisexuality has given rise to considerable conflict in the African-American community. African-Americans account for 49% of the HIV/AIDS cases in the US (Center for Disease Control & Prevention, 2004 as cited in Wyatt, Williams, & Myers, 2008). The major transmission of HIV in African-American men is through male to male sexual contact. Many African-American men who have sex with men, however, are also having sex with women. The vast majority of African-American bisexual men do not disclose their sexual identity (Millet, Malebranche, Mason, & Spikes, 2005). This potentially accounts for the increase in the spread of HIV/AIDS to African-American women.

Mate Selection and Evolution

Evolutionary theorists argue that humans have several different strategies of mating. Buss (2007), for example, listed long-term mating strategies, short-term mating, and extra-pair mating strategies. Long-term sexual relationships require large investments from both partner and typically result in marriage and children. Buss (2007) found that is most valued trait in a long-term relationship is mutual attraction and love.

According to *parental investment theory* women seek mates that secure resources and greater social status. This reflects the need for security in respect to rearing children. Women carry a higher physical investment in the long-term relationship in that they carry the child for nine months and invest more in the child than the father (Trivers, 1985; Jennions & Petrie, 2000). Therefore, women should be more selective when it comes to

selecting a mate. Men, on the other hand, perceive other qualities to be of more importance. Parental investment theory suggests that men seek more mates and value physical attractiveness and youth, which are cues to fertility (Buss, 2007).

There are differences in the strategies men and women employ in short-term mating strategies. Men are more likely to desire casual sexual encounters than women. Clark and Hatfield (1989) conducted a study which confirmed that men were more likely to have casual sex with a female than to go out on a date with that female. Women, however, employ a different approach in short-term sexual encounters. Greiling and Buss (2000) found that women select short-term mates for resource acquisition and mate switching. In regards to the mate switching tactic, women seek to replace a current mate with one whom will commit to her, provide better resources, or have higher social status (Buss, 2007). This tactic suggests that casual sex in women serves a purpose beyond the physical act; finding a mate that may provide better genes or resources. Wiederman and Dubois (1998) found that men rated short-term mates as more desirable than long-term mates, and women found it more difficult than men to imagine a short-term mate. But they also concluded that the participants in the study had little conscious insight into the factors that influenced their ratings.

Another issue that arises in mate selection is sexual permissiveness. According to Buss (1994), males desire sexually permissive partners in low commitment relationships but non-permissive partners in high commitment relationships. Oliver and Sedikides (1992) found that males prefer higher levels of sexual permissiveness in a blind date or hook up, as opposed to a spouse, and that males prefer females that are less sexually permissive. These findings support the sexual double standard that sexually permissive

females are acceptable for short-term sexual relationships but not for long-term relationships.

Criticisms of Evolutionary Theories of Mate Selection

Buller (2005) disagrees with evolutionary theories of mate selection. Buller argues that evolutionary psychologists have provided little convincing evidence that these differences in mate selection are evolved adaptations. Evolutionary theorists, Buller claims, presuppose that this adaptation is universal. Buller criticizes the research Buss used to support his claim that men select younger women. He points out that the age difference of participants in Buss's study was less than three years, which is not a large enough to support Buss's argument. Buller claims that if the preference for younger women was a universal phenomenon, it would hold true over the course of the male life cycle, which it does not.

Buller (2005) also criticizes the claim that women prefer higher status males. Buss found the average age at which males marry was 27 years old. But if women prefer higher status males, it is unlikely that by this age a man is established enough to achieve a high status and resources. Further, Buller suggests that although older men have the ability to sire children in older age, they often chose not to. Moreover, Buller argues that younger women are not attracted to older men and prefer males closer to their own age.

Evolutionary theorists believe humans desire the most attractive and fittest mates. But Buller (2005) argues that if everyone selected such mates, competition would be so intense that it would be impossible to satisfy the demand. Further, Buller claims that even those who are deemed to be a "six" are actually just as reproductively fertile as a "ten". Buller also argues that although one female may be able to provide a man with

more children and another female may provide fewer children, there is still sufficiently great potential to pass along genes through subsequent generations regardless of the number of initial offspring. Buller says that the evidence simply does not support evolutionary theories of mate selection.

Despite Buller's criticisms of evolutionary psychology a majority of researchers support the work of evolutionary theorists, as well as corroborate evolutionary claims and speculate about the reasons for such vehement critics of evolutionary theories. It has been posited that in fact there is less evidence to support skepticism of evolutionary psychology, and that criticisms might exist due to inconsistencies in the quality of past evolutionary research. Further, much research is based on the tenets of evolutionary theories to explain biological basis of human behaviors, and has often been employed by cognitive psychologist to account for human cognitive experiences (Downes, 2010).

Physical Attractiveness

The importance of attractiveness differs between men and women. Physical attractiveness makes for more positive social outcomes such as attracting more friends and higher dating frequencies (Feingold, 1992). Also, physical attractiveness leads to increased social status (Anderson, John, Keltner, & Kring, 2001). In speed dating trials, men placed more emphasis on physical attractiveness than women (Wilson, Cousins, & Fink, 2006). Women, on the other hand, found themselves initially drawn to the more attractive males, but the resources of the man were ultimately more important than physical attractiveness in deciding whether they would be interested in meeting them again. Men are more likely than women to base their desire of a sexual relationship on physical attractiveness; although, men are less selective than women in their perceptions

of attractiveness. This suggests that men have a threshold of attractiveness (Todd, Penke, Fasolo, & Lenton, 2007).

But what makes people attractive? Facial symmetry may increase physical attractiveness (Thornhill, 1998). However, Scott et al. (2010) found that the shape of a man's face did not determine his attractiveness. They found skin tone was a better predictor of attractiveness and is an indicator of health (Scott et al., 2010, Fink et al. 2001, Fink & Voak, 2002). Teuscher and Teuscher (2007) found that younger faces were rated higher in attractiveness compared to older faces. Scheib, Gangestad, and Thornhill (1999) found that relationships exist between facial symmetry and attractiveness ratings. However, Fink and Voak (2002) posit that symmetry may not be an evolutionary adaptation of attractiveness. Rather it is one part of a more complex perceptual system in humans. They found that average faces are often rated as more attractive than faces that have been altered to depict a more symmetrical appearance. Fink and Voak (2002) also report that markers of attractiveness are highly variable among individuals and are based on life experiences. Fink and Voak state that further research is needed to determine how individual's life experiences affect their judgments of attractiveness.

Some evidence suggests that women prefer men with more stereotypical masculine features. One such feature is a predominant jaw bone which produces a more square facial appearance (Gangestad & Thornhill, 1999). Facial features such as a predominant brow and cleft chin also contribute to a stronger masculine face. The alternative view is that women prefer a mate with a more feminine facial structure, marked by a rounder face with softer features.

Women differ in their ratings of men as a potential mate at differing times in their fertility cycle (Gangestad, Thornhill, & Garver-Apgar, 2010). Women nearing the peak in their fertility cycle rate men as more attractive when they possess the more square facial structure and softer facial features at other times. Further, women find men with a lower body mass index and higher musculature to be more attractive. Although evolutionary theories account for differences between sexes in regard to attractiveness and mate selection, other relevant characteristics account for individual differences within our species.

Sensation-Seeking

Sensation-seeking is a psychological characteristic in which individuals seek out experiences which are novel and intense (Zuckerman, 1994). These experiences are often associated with increased risks. The risks involved may be physical, social, or financial in nature. Zuckerman (2007) recognizes four components in sensation-seeking: disinhibition, experience seeking, thrill and adventure seeking, and boredom susceptibility.

Individuals who score high on Zuckerman's Sensation-seeking Scale-V (1978) tend to abuse drugs and alcohol, engage in extreme sports, make frequent career switches, drive recklessly, and engage in more sexual behaviors. Donohew et al. (2000) and Zuckerman (2007) noted that individuals with characteristics of impulsive sensation seeking often engage in riskier sex practices. Individuals who score high on sensation-seeking are often recognizable by their no fear attitude and are often perceived as the "wild child" or the "crazy" friend you may have known in college. These individuals are bored with the mundane experiences of everyday life.

Sensation-seeking is a stable personality trait that varies by gender. (Zuckerman, 1994; Lynne-Landsman, Graber, Nichols, & Botvin, 2011). Males exhibit higher levels of sensation-seeking than females, particularly on the disinhibition and thrill and adventure seeking subscales. Males also have a propensity to engage in more risky behaviors than females. Zuckerman attributes these sex differences to biological factors such as testosterone. Stoel, De Geus, and Boomsma (2006) found that males remain to score higher than females on all four subscales of sensation-seeking. They used twin studies to show sensation-seeking is heritable, with the highest levels of heritability found in male experience seeking and disinhibition and male thrill and adventure seeking. The lowest level of heritability is found in female boredom susceptibility.

Greene, Krcmar, Walters, and Rubin (2000) found interactions between sensation-seeking and personal fable. Their measure of personal fable assessed three characteristics: omnipotence, uniqueness, and invulnerability. The highest levels of risky sexual behaviors were experienced by people who scored high on both sensation-seeking and personal fable. Moderate risky sexual behavior was experienced by those who scored high in sensation-seeking and low in personal fable.

McCoul and Haslam (2001) used sensation-seeking and impulsivity to predict risky sexual behaviors of both heterosexual and homosexual men. They found that the groups did not differ in regards to the frequency of unprotected sex or the number of unprotected sexual partners. However, homosexuals scored higher on sexual sensation-seeking than the heterosexual individuals, and they used drugs more frequently before unprotected sex. This may hold true for bisexual individuals as well. Donohew et al. (2000) report that individuals who are sensation seekers that engage in risky sexual

behaviors are at a much greater risk of sexually transmitted diseases, HIV, and pregnancy. However, it is conceivable that other mediating factors could account for further differences between individuals, particularly with regard to sexual practices.

Disgust

Disgust is an emotion that individuals become aware of early in life. Many associate feelings of disgust with food or aversive stimuli. However, disgust also contributes to socialization, specifically negative socializations, and associated with withdrawal from experiencing or thinking about offensive stimuli (Rozin, Haidt, McCauley, Dunlop, & Ashmore, 1999). It was also suggested that disgust is involved in morality which is influenced by culture.

The emotion of disgust was also studied as mediating factor of homophobia (Olatunji, 2008). It was found that core disgust was a predictor of negative attitudes toward homosexual individuals. Disgust was also found to be an expressed emotion toward lesbian, gay, and bisexual individuals (Herek, 1994).

Disgust is often associated with food; however, Freud claimed that disgust was also closely related to sex-related responses (Haidt, McCauley, & Rozin, 1994). The disgust is also a defensive emotion. Individuals with a higher sensitivity to disgust are believed to employ disgust as a defensive emotion to guard against external threats (Haidt et al., 1994). These individuals are not only more prone to disgust, but are also lower in sensation seeking.

Personality

The Five-Factor Model holds that human personality consists of five broad domains: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and

Conscientiousness (Costa & McCrae, 1995). McCrae and John (1992) state that the Five Factor Model better represents the structure of personality traits than other models. Five Factor Model theorists claim that these five factors are components of all personality instruments (McCrae & John, 1992). Laypersons define personality in terms such as friendly, punctual, and high-strung. McCrae and John (1992) state that it is imperative for a complete theory of personality to explain the phenomena in terms that are used in everyday life. They argue that if personality is universal, by studying humans' natural language, basic factors emerge from the lexicons.

McCrae and John (1992) argue that, in addition to empirical evidence, the descriptors of the five factors make intuitive sense. Neuroticism is the tendency to experience distress. Also it can be understood how a person thinks about unpleasant experiences. Recurrent nervous tension, depression, and experiences of distress are associated with irrational thinking, low self esteem, somatic complaints, and ineffective coping (McCrae & Costa, 1987).

Extraversion refers to an individual's quantity and intensity of interpersonal interaction, activity level, need for stimulation, and capacity for joy.

The trait of Openness to Experience is an individual's tendency to seek and appreciate experience for its own sake and to tolerate the unfamiliar. McCrae and Costa (1987) state that the trait of openness is comparable to Zuckerman's concept of sensation-seeking.

Agreeableness is the quality of one's interpersonal orientation along a continuum from compassion to antagonism. McCrae and John (1992) state that agreeable people are more altruistic, caring, emotionally supportive as opposed to being antagonistic.

Conscientiousness refers to one's degree of organization, persistence and motivation in goal-directed behavior. Theorists have proposed varying conceptions of conscientiousness that have included prudence, constraint, and a will to achieve. McCrae and John (1992) argue that the term conscientiousness combines these, and that the traits covary empirically.

McCrae and John (1992) state that the Five Factor Model allows for cohesive communication amongst researchers having different theoretical orientations. Furthermore, due to the comprehensiveness of the model, it allows for exploration of personality and other psychological phenomena. Efficiency is another major advantage of the Five Factor Model as it provides an overall description of personality in only five factors. McCrae and John also argue that the Five Factor Model may be applied in a wide variety of research contexts. Finally, the Five Factor Model has been replicated across instruments and observers (McCrae & Costa, 1987).

STATEMENT OF THE PROBLEM

Men and women perceive sexual attractiveness differently. Individuals usually assume knowledge of the potential mate's sexual identity. However, looks can be deceiving. Men and women may be drawn to an attractive individual only later to find that the person identifies as bisexual. Upon discovering the bisexual identity of the potential partner, they may no longer find themselves attracted to the individual. Evolutionary psychology theorizes that humans seek out mates that meet their needs for reproduction (Buss, 2007). Men seek out short-term relationships to procure more sexual encounters, and men have lower standards of attractiveness when seeking a short-term mate (Buss, 2000). However, women seek out men who will provide resources, social status, and contribute a high paternal investment in offspring in long-term relationships. Women engaging in short-term relationships consider the long-term relationship potential of that mate (Greiling & Buss, 2000).

Personality traits define who we are as individuals and are understood best in five broad domains, the Five Factor Model (McCrae & John 1992). Sensation-seeking is also a personality characteristic. These personality traits and characteristics drive our behavior and influence our thinking and perceptions; possibly including decisions related to mate selection.

The present study integrated research on sexual attractiveness, personality, and perceptions of bisexuality. The literature on attractiveness primarily focuses on heterosexual attraction to the opposite sex. But how do heterosexual individuals perceive the potential of engaging in a sexual relationship with a bisexual individual? It is

possible that people have engaged in such sexual relationships with bisexual individuals without knowledge of the person's true sexual identity (Millett, Malebranche, Mason, Spikes, 2005). Bisexual individuals may employ deception to secure sexual relationships by members of the opposite sex.

The purpose of this study was to determine how perceived attractiveness ratings and interest in establishing a sexual relationship differ when the perceiver is aware of the bisexual identity of a potential mate. This study also investigated how the perceiver's gender affects their ratings of bisexual individuals, how sensation seeking and disgust are related to attractiveness ratings, and the influence of other primary personality traits.

Hypotheses

1. Men will rate photos of bisexual women more attractive than photos of heterosexual women, and they will express more interest in engaging in a sexual relationship with bisexual women. This hypothesis is based on evolutionary psychology principle that males desire more sexual partners due to sex differences in parental investment, and desire more varied sexual experiences.
2. Women will rate photos of bisexual men less attractive than photos of heterosexual men and they will be less interested in engaging in a sexual relationship with them. This hypothesis is based on parental investment theory.
3. A difference in attractiveness ratings will be observed between men and women, with male participants rating bisexual individuals more attractive than female participants. This hypothesis is based on differences in attractive characteristics of potential mates.

4. Sensation-seeking will be positively correlated with higher ratings of attractiveness of photos of bisexual individuals. This hypothesis is based on the propensity for risky sexual behaviors in high sensation seekers.
5. Disgust sensitivity will be negatively correlated with ratings of attractiveness of photos of bisexual individuals. This hypothesis is based on previous research indicating that disgust is a mediating factor in homophobia.
6. Extraversion will be positively correlated with ratings of attractiveness of photos of bisexual individuals. This hypothesis is based on the more outward expressions of the self found in extraverted individuals.
7. Neuroticism will be negatively correlated with ratings of attractiveness of photos of bisexual individuals. This hypothesis is based on the fact that individuals high on neuroticism are more susceptible to negative thoughts and emotions.
8. Openness to experience will be positively correlated with ratings of attractiveness of photos of bisexual individuals. This hypothesis is based on the findings showing that individuals high in openness seek out experiences for experience sake.

METHOD

Participants

Participants ($N=154$) students were recruited from undergraduate psychology courses at a public southeastern university. After exclusion criteria, based on participant's self reported sexual identity (5.6% Gay, 5.6% Lesbian, 7% Bisexual) and incomplete surveys, 116 participants (53 males, 63 females) were included in the analysis. None reported being less than 18 years of age ($M= 21.55$, $SD= 2.11$). Participants completed the study online using Qualtrics, an online survey program. Participants received extra credit in their course for their participation in the study.

Materials

Sensation-Seeking Form V. The Sensation-seeking Form V (SSS-V) (Zuckerman, 2007) includes four subscales: disinhibition, experience seeking, thrill and adventure seeking, and boredom susceptibility (Appendix A). The scale is comprised of 40 questions, which are forced responses with two choices for each question. For items that individuals think are not representative of themselves, they are requested to select the response they dislike the least or is the better description of their likes or feelings. The SSS-V is a reliable measure with Cronbach's alpha of .91 on the subscale of thrill and adventure seeking, .79 on experience seeking, .83 on disinhibition, and .72 on boredom susceptibility (Zuckerman, 2007).

Disgust Scale Revised. The Disgust Scale Revised (DS-R) (Olatunji et al., 2007) is comprised of three subscales: core disgust, animal-reminder disgust, and contamination disgust (Appendix B). The scale is comprised of 27 statements, in which individuals

provide a rating for each item indicating their level of disgust, ranging from not disgusting at all to extremely disgusting. The DS-R is a reliable measure with Cronbach's alpha of .87 for the entire scale, .78 on the subscale of core disgust, .78 on animal-reminder disgust, and .54 on contamination disgust (van Overveld, de Jong, Peters, & Schouten, 2011).

M5-50. The M5-50 is a personality inventory which assesses individual's traits in Neuroticism, Extraversion, and Openness to Experience, Agreeableness, and Conscientiousness, based on the Five Factor Model (Costa & McCrae, 1995). The M5-50 is a self report measure based on a 5-point Likert scale with responses of: Inaccurate, Moderately Inaccurate, Neither, Moderately Accurate, Accurate (Appendix C). Some of the items are reversed score, with factor domain output scores reported as a raw score. The M5-50 was found to be very reliable with Cronbach's alphas of .86, .76, .85, .86, and .78 for each of the five factors, respectively (Socha, Cooper, & McCord 2010).

Attractiveness Scale. The Attractiveness Scale is a self report measure created for the purpose of this study. Individuals assign a rating of how attractive one finds individuals in a series of photographs. . The attractiveness scale is a 4-point scale (Very Unattractive, Unattractive, Attractive, Very Attractive). The scale was used in this study to obtain average ratings of photos to allow for analysis between bisexual individuals and heterosexual individuals and to assess for differences between males and females.

Interest in Sexual Relationship Scale. The Scale of Interest in Sexual Relationship is a self report measure on which ratings of photographs are assigned on the desirability of engaging in a sexual relationship with an individual. The interest in sexual relationship scale is a 4-point scale (Very Uninterested, Uninterested, Interested, Very

Interested). The scale was used in this study to obtain desirability ratings of photos of bisexual and heterosexual individuals to assess for differences between groups as well as differences between males and females.

Photos. Ten photos (5 males, 5 females) acquired from public domain were used in the study. Participants rate the attractiveness and sexual desirability of the model in the picture. Photos of two males similar in appearance and photos of two females similar in appearance were used for data analysis. A panel of judges was used to select the males and female photos to verify the similarities in ratings of their appearance. The remaining photos were used as dummies to disguise the purpose of the study. Only the photos of similar appearing models were analyzed. Each photo was displayed immediately following a short profile indicating their education, annual salary, the brand of automobile owned, religious affiliation, political affiliation, and sexual identity experiences. The profiles of the two target models were comparable in all regards except sexual identity. In the bisexual condition, the description stated this individual was interested in sexual relationships with both males and females. In the heterosexual condition the description stated this individual is interested in sexual relationships with members of the opposite sex. The target biographical profiles used in the study for female models are included in Appendix D and profiles for male models are included in Appendix E.

Procedure

The study was conducted using Qualtrics, an online survey program. Participants were informed that their participation in the study was confidential. The participants provided demographic information, including their age, race, and sexual identity. Data

from participants who reported a sexual identity other than heterosexual were not analyzed, as the purpose of this study was to obtain ratings from exclusively heterosexual individuals.

Female participants were shown photos of five males, two of which are similar in appearance, with one male photo assigned to the heterosexual condition and one assigned to the bisexual condition. Male participants were shown photos of two similar looking females in which one female was assigned to the heterosexual condition and one was assigned to the bisexual condition. The assignment of a heterosexual identity and bisexual identity to the photos were randomized to test for differences in attractiveness ratings. The orders in which the photos were presented were randomized to control for ordering effects. Participants rated the individual's attractiveness on a 4-point Likert type scale ranging from very unattractive to very attractive, and then rated their interest in engaging in a sexual relationship with the individual on a 4-point Likert type scale ranging from very uninterested to very interested.

Participants completed Zuckerman's Sensation-seeking Form V (SSS-V) survey to assess their propensity for engaging in risk taking behaviors immediately after rating photos. Participants then completed the M5-50 Personality Inventory to assess scores obtained for the five factors. Participants then completed the Disgust Scale-Revised (DS-R) to assess for one's proneness to feelings of disgust.

RESULTS

Attractiveness Ratings

A repeated measures multivariate analysis of variance was conducted to explore the impact of the participant's sex on ratings of physical and sexual attractiveness of heterosexual and bisexual models. A significant interaction was observed between participant's sex and physical attractiveness, Wilks $\lambda = .86$, $F(1, 114) = 18.57$, $p = .00$, partial $\eta^2 = .14$. The male participants rated heterosexual female models ($M = 3.21$, $SD = .51$) more attractive than bisexual female models ($M = 2.47$, $SD = .77$). The female participants rated heterosexual male models ($M = 2.75$, $SD = .54$) more attractive than bisexual male models ($M = 2.41$, $SD = .85$). A significant interaction was also observed between participant's sex and sexual attractiveness, Wilks $\lambda = .90$, $F(1, 114) = 12.42$, $p = .001$, partial $\eta^2 = .11$. The male participants also rated heterosexual female models ($M = 3.02$, $SD = .77$) more sexually attractive than bisexual female models ($M = 2.15$, $SD = .84$). The female participants also rated heterosexual male models ($M = 2.19$, $SD = .80$) more attractive than bisexual male models ($M = 1.84$, $SD = .85$).

Thus, Hypothesis 1, that male participants would rate bisexual females more physically and sexually attractive than heterosexual females was not supported. Hypothesis 2, that female participants would rate bisexual male models less physically and sexually attractive than heterosexual females was supported. Despite significant interactions between participant's sex and physical and sexual attractiveness, Hypothesis 3, that males would rate bisexual models more attractive than heterosexual models overall was not supported. Male and female participant's consistently rated models in the

bisexual condition less attractive in both levels of attractiveness. However, male participants generally provided higher ratings of both heterosexual and bisexual models, although bisexual ratings were not significantly different.

Sensation Seeking

Hypothesis 4, that sensation seeking would be positively correlated with higher ratings of attractiveness of bisexual individuals, was supported for male participants. This finding suggests that individuals who possess greater propensity for sensation seeking tend to rate bisexual individuals more attractive than individuals who are lower in sensation seeking characteristics. The relationship between overall attractiveness ratings of bisexual individuals and sensation seeking was investigated using Pearson correlation coefficient. A significant correlation was observed between the two variables, $r = .31$, $n = 53$, $p < .05$, with high levels of sensation seeking associated with higher ratings of overall attractiveness of bisexual individuals. No significant relationship was observed for female participants. Further exploratory analysis of sensation seeking subscales determined that the experience seeking subscale was positively correlated with higher ratings of overall attractiveness of bisexual individuals for male participants, $r = .32$, $n = 53$, $p < .05$.

Disgust

Hypothesis 5, that disgust sensitivity would be negatively correlated with overall ratings of bisexual models, was not supported. The relationship between overall attractiveness ratings of bisexual individuals and disgust was investigated using Pearson correlation coefficient. No significant relationship was observed for male participants, r

= $-.24$, $n = 53$, $p = .09$. No significant relationship was observed for female participants, $r = -.18$, $n = 63$, $p = .16$.

Personality Traits

The relationship between overall attractiveness ratings of bisexual individuals and personality traits (Extraversion, Neuroticism, and Openness to Experience) were investigated using Pearson correlation coefficient. No significant associations were observed for male participants between overall attractiveness ratings of bisexual models and Extraversion, $r = -.16$, $n = 53$, $p = .27$, nor for female participants, $r = -.05$, $n = 63$, $p = .72$. No significant associations were observed for male participants between overall attractiveness ratings of bisexual individuals and Neuroticism, $r = .065$, $n = 53$, $p = .64$, nor for female participants, $r = .007$, $n = 63$, $p = .96$. Thus, Hypothesis 6, that Extraversion would be positively correlated with higher overall attractiveness ratings of bisexual individuals, nor, Hypothesis 7, that Neuroticism would be negatively correlated with higher overall attractiveness ratings of bisexual individuals, were not supported. No significant association was observed for male participants between overall attractiveness ratings of bisexual individuals and Openness to Experience, $r = .20$, $n = 53$, $p = .15$. However, a significant positive association for female participants was observed between overall attractiveness ratings of bisexual individuals and Openness to Experience, $r = .32$, $n = 63$, $p = .01$. Thus, hypothesis 8 was supported for female participants, that Openness to Experience would be positively correlated with higher overall attractiveness ratings of bisexual individuals.

DISCUSSION

The current research was designed to test differences in physical and sexual attractiveness ratings between potential heterosexual and bisexual mates, as well as differences in ratings between males and females. Also, the research addressed which personality traits and characteristics are related to the differences in ratings by both males and females.

The results obtained in this study support the idea that attractiveness ratings of individuals labeled as bisexual are significantly lower than that of individuals labeled as heterosexual. These findings suggest that individuals are less interested in engaging in sexual relationships with bisexual individuals. Surprisingly, not only are sexual attractiveness ratings of those with a bisexual identity lower than those with a heterosexual identity, but physical attractiveness ratings are also affected by perceived sexual identity. In addition, the participant's personality traits and characteristics were related to individual's perceptions of physical and sexual attractiveness.

Significant differences were observed for male participants in their ratings of heterosexual and bisexual females -- heterosexual females received higher ratings of both physical and sexual attractiveness. Significant differences were also observed among female participants in their ratings of heterosexual and bisexual males -- heterosexual males received higher ratings in terms of physical and sexual attractiveness. These differences in ratings suggest that bisexual individuals are perceived to be less attractive than their heterosexual counterparts. Counter to the hypotheses, males and females did not differ significantly in their ratings of the bisexual models. This finding is interesting

in that the images of “bisexual” models were the same images of “heterosexual” models. This suggests that sexual identity affects how they are perceived by heterosexual individuals.

The hypothesis that males would rate “bisexual” females as more attractive was based on the evolutionary psychology claim that males tend to be interested in more sexual relationships than do women (Buss, 1994). It did not seem to be a stretch, if this concept held true for the males in this study, that they would have been more interested in engaging in sexual relationships with “bisexual” females. It has been suggested by pop culture that male fantasies occasionally include a ménage a trois scenario with two females. If this claim were true, it would have been expected for the “bisexual” models to have been consistently rated more sexually attractive than “heterosexual” females. Further, bisexual females would have the potential to engage with more sexual partners. However, the results of this study failed to support such claims. These results suggest that it is possible that college age males are more sexually conservative than often assumed. . It could be that the word “relationship” impacted the ratings of sexual desirability, which would support evolutionary theories that males prefer more “sexually conservative” partners in relationships (Buss, 1994).

The results obtained from female participants supported claims that females are more selective in terms of choosing a mate (Trivers, 1985). The female participants tended to rate “bisexual” males significantly lower overall than their “heterosexual” counterparts. This finding could suggest that females are concerned about the commitment to a relationship and parental responsibilities if they were involved in a sexual relationship with a bisexual individual. Females may worry that a bisexual partner

would abandon them for a same sex mate or are “transitioning” from a heterosexual to homosexual identity. Further, given the discrimination members of alternative sexual identities face, it may prove more difficult for a self identified bisexual male to obtain a higher social status or to acquire great resources, which are qualities evolutionary theorists claim are important in mate selection for the female species.

Surprisingly, disgust sensitivity was not significantly related to lower ratings of physical and sexual attractiveness of bisexual individuals. Since disgust sensitivity has been established as a mediating factor of homophobia (Olatunji, 2008), it seemed reasonable that the “bisexual” models would be conceptualized similarly to homosexuals, resulting in lower ratings. These findings suggest that bisexuality may be conceptualized differently than homosexuality or that bisexuality is a less offensive morally.

Personality traits were also related to the rating outcomes of the bisexual models. Participants who scored higher on traits of sensation seeking tend to rate bisexual individuals more physically and sexually attractive than those who scored lower on traits of sensation seeking. This finding supports claims that individuals higher in sensation seeking personality characteristics are more likely to engage in risky sexual behaviors (Donohew et al., 2000; Zuckerman, 2007). Specifically, individuals who scored higher on the experience seeking subscale tend to find bisexual individuals more attractive. This suggests that bisexual individuals are possibly more exciting sexually or that they themselves are viewed as higher in sensation seeking, thus open to more sexual experiences.

Results from the Big-Five personality test found that of the five facets, only openness to experience was related to higher ratings of bisexual individuals for female

participants. This finding suggests that individuals who score higher on this personality trait are more likely to be interested in engaging in a sexual relationship with a bisexual individual than those who are less open to experience. This finding was also consistent with those who scored higher on the experience seeking subscale of the sensation seeking measure. This was not surprising as McCrae and Costa (1987) stated that this personality trait is comparable to Zuckerman's concept of sensation-seeking.

Implications

The current research was designed to test differences in physical and sexual attractiveness ratings between potential heterosexual and bisexual mates, as well as differences in ratings between males and females. Also, the research addressed which personality traits and characteristics are related to the differences in ratings by both males and females. Significant differences were observed for male participants in their ratings of heterosexual and bisexual females, where heterosexual females received higher ratings of both physical and sexual attractiveness. Significant differences were also observed for female participants in their ratings of heterosexual and bisexual males, where heterosexual males received higher ratings in terms of physical and sexual attractiveness. These differences in ratings, based on sexual identity suggests that, generally, bisexual individuals are perceived to be less attractive than their heterosexual counterparts. Counter to the hypothesized results, males and females did not differ significantly in their ratings of the bisexual subjects. This finding is very interesting, in that the images of bisexual subjects were the same images of heterosexual subjects, while only the subject's sexual identity was manipulated based on the condition in which they were displayed. This suggests that one's sexual identity in fact affects how they are perceived by

heterosexual individuals. Further, these findings would be helpful for clinicians working with bisexual individuals in understanding yet another form of discrimination these individuals might experience and could conceivably underlie presenting concerns in therapy.

Limitations of the Study

The present study did not include analyses of responses provided by participants who identified a sexual identity other than heterosexual. Also, the participants in the study were college students and may not be representative of the population at large. Another limitation to the study is that females have been reported to have greater difficulty imagining themselves in short term sexual relationships. This could have affected the ratings assigned to the male models in both “heterosexual” and “bisexual” conditions. Further, the fact that a 4-point Likert type scale was used could have limited the range of possible scores provided.

Conclusions

The results suggest that individuals perceived “bisexual individuals” differently than “heterosexual” individuals when their sexual identity is disclosed. This finding may account for “down-low” culture wherein bisexual individuals may not disclose their true sexual identity due to concern for procurement of potential relationships or discrimination. The results of this study suggest that both males and females rate bisexual individuals as less attractive and are less interested in engaging in sexual relationships.

Personality traits and characteristics were related to perceptions of attractiveness of bisexual individuals. Individuals who are greater propensity for sensation seeking

characteristics tend to rate bisexual individuals as more attractive than those who scored lower on sensation seeking. Also, individuals who are more open to experience tend to rate bisexual individuals as more physically attractive and are more open to engaging in a sexual relationship. Individuals who are more prone to feelings of disgust tend to rate bisexual individuals as less attractive and less interested in sexual relationships with those individuals. These findings suggest that there are more variables at work in determining how attractive a person is other than their physical appearance.

REFERENCES

- Anderson, C., John, O. P., Keltner, D., & Kring, A. M. (2001). Who attains social status? Effects of personality and physical attractiveness in social groups. *Journal of Personality and Social Psychology, 81*(1), 116-132.
- Barker, M. (2007). Heteronormativity and the exclusion of bisexuality in psychology. In V. Clarke & E. Peel (Eds.), *Out in psychology* (pp. 95-117). Hoboken, NJ: John Wiley & Sons Inc.
- Bem, D. J. (1996). Exotic becomes erotic: A developmental theory of sexual orientation. *Psychological Review, 103*(2), 320-335.
- Buller, D. J. (2005). *Adapting minds: Evolutionary psychology and the persistent quest for human nature*. Cambridge, MA: MIT Press.
- Buss, D. M. (2000). *Evolutionary psychology*. New York, NY: Oxford University Press.
- Buss, D. M. (2007). The evolution of human mating. *Acta Psychologica Sinica, 39*(3), 502-512.
- Buss, D. M., & Hern, W. (1994). *The evolution of desire: Strategies of human mating*. New York, NY: Basic Books.
- Clark, R. D., & Hatfield, E. (1989). Gender differences in receptivity to sexual offers. *Journal of Psychology and Human Sexuality, 2*(1), 39-55.
- Costa, P. T., & McCrae, R. R. (1995). Primary traits of Eysenck's PEN system: Three- and five-factor solutions. *Journal of Personality and Social Psychology, 69*(2), 308.
- Donohew, L., Zimmerman, R., Cupp, P. S., Novak, S., Colon, S., & Abell, R. (2000). Sensation-seeking, impulsive decision-making, and risky sex: Implications for risk-

- taking and design of interventions. *Personality and Individual Differences*, 28(6), 1079-1091.
- Downes, S.M. (2010). Evolutionary psychology. *The Stanford Encyclopedia of Philosophy*, (Fall 2010 Edition). Edward N. Zalta (Ed.), Retrieved from <http://plato.stanford.edu/archives/fall2010/entries/evolutionary-psychology>.
- Eliason, M. J., & Schope, R. (2007). Shifting sands or solid foundation? lesbian, gay, bisexual, and transgender identity formation. In: I. H. Meyer & M. E. Northridge (Eds.). *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual and transgender health*. (pp. 3–26). New York, NY: Springer.
- Feingold, A. (1992). Gender differences in mate selection preferences: A test of the parental investment model. *Psychological Bulletin*, 112(1), 125-139.
- Fink, B., & Penton-Voak, I. (2002). Evolutionary psychology of facial attractiveness. *Current Directions in Psychological Science*, 11(5), 154-158.
- Fox, R. C. (2000). Bisexuality in perspective: A review of theory and research. In: B. Greene & G. L. Croom (Eds.) *Education, research, and practice in lesbian, gay, bisexual, and transgendered psychology: A resource manual*. (pp. 161-206). Thousand Oaks, CA: Sage Publications Inc.
- Gangestad, S. W., Thornhill, R., & Garver-Apgar, C. E. (2010). Men's facial masculinity predicts changes in their female partners' sexual interests across the ovulatory cycle, whereas men's intelligence does not. *Evolution and Human Behavior*, 31(6), 412-424.
- Garber, M. G. (2000). *Bisexuality and the eroticism of everyday life*. New York, NY: Routledge.

- Greene, K., Krcmar, M., Walters, L. H., & Rubin, D. L. (2000). Targeting adolescent risk-taking behaviors: The contributions of egocentrism and sensation-seeking. *Journal of Adolescence*, 23(4), 439-461.
- Greiling, H., & Buss, D. M. (2000). Women's sexual strategies: The hidden dimension of extra-pair mating. *Personality and Individual Differences*, 28(5), 929-964.
- Haidt, J., McCauley, C., & Rozin, P. (1994). Individual differences in sensitivity to disgust: A scale sampling seven domains of disgust elicitors. *Personality and Individual Differences*, 16, 701-713.
- Herek, G.M. (1994). Assessing attitudes toward lesbian and gay men: A review of empirical research with the ATLG scale. In: B. Greene & G.M. Herek (Eds.) *Lesbian and Gay Psychology* (pp. 206-228). Thousand Oaks, CA: Sage.
- Jennions, M. D., & Petrie, M. (2000). Why do females mate multiply? A review of the genetic benefits. *Biological Reviews of the Cambridge Philosophical Society*, 75(01), 21-64.
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Bloomington, IN: Indiana University Press.
- Klesse, C. (2005). Bisexual women, non-monogamy and differentialist anti-promiscuity discourses. *Sexualities*, 8(4), 445.
- Lynne-Landsman, S., Graber, J. A., Nichols, T. R., & Botvin, G. J. (2011). Is sensation-seeking a stable trait or does it change over time? *Journal of Youth and Adolescence*, 40(1), 48-58.
- Malcolm, J. P. (2000). Sexual identity development in behaviourally bisexual married men. *Psychology, Evolution & Gender*, 2, 263-299.

- McCoul, M. D., & Haslam, N. (2001). Predicting high risk sexual behaviour in heterosexual and homosexual men: The roles of impulsivity and sensation-seeking. *Personality and Individual Differences, 31*(8), 1303-1310.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology, 52*(1), 81-90.
- McCrae, R. R., & John, O. P. (1992). An introduction to the Five Factor Model and its applications. *Journal of Personality, 60*(2), 175-215.
- Millett, G., Malebranche, D., Mason, B., & Spikes, P. (2005). Focusing" down low": Bisexual black men, HIV risk and heterosexual transmission. *Journal of the National Medical Association, 97*(7), 52S-59S.
- Myers, T., Allman, D., Xu, K., Remis, R. S., Aguinaldo, J., Burchell, A., & Swantee, C. (2009). The prevalence and correlates of hepatitis C virus (HCV) infection and HCV-HIV co-infection in a community sample of gay and bisexual men. *International Journal of Infectious Diseases, 13*(6), 730-739.
- Olatunji, B.O. (2008). Disgust, scrupulosity and conservative attitudes about sex: Evidence for a mediation model of homophobia. *Journal of Research and Personality, 42*(5), 1364-1369.
- Olatunji, B.O., Williams, N.L., Tolin, D.F., Abramowitz, J.S., Sawchuk, C.N., Lohr, J.M., & Elwood, L.S. (2007). The disgust scale: Item analysis, factor structure, and suggestions for refinement. *Psychological Assessment, 19*(3), 281-297.

- Oliver, M. B., & Sedikides, C. (1992). Effects of sexual permissiveness on desirability of partner as a function of low and high commitment to relationship. *Social Psychology Quarterly*, 55(3), 321-333.
- Petford, B. (2003). Power in the darkness: some thoughts on the marginalisation of bisexuality in psychological literature. *Lesbian & Gay Psychology Review*, 4(2), 5-13.
- Rozin, P., Haidt, J., McCauley, C., Dunlop, L., & Ashmore, M. (1999). Individual differences in disgust sensitivity: Comparisons and evaluations of paper-and-pencil versus behavioral measures. *Journal of Research in Personality*, 33, 330-351.
- Socha, A., Cooper, C.A., & McCord, D.M. (2010). Confirmatory factor analysis of the M5-50: An implementation of the international personality item pool set. *Psychological Assessment*, 22(1), 43-49.
- Stoel, R. D., De Geus, E. J. C., & Boomsma, D. I. (2006). Genetic analysis of sensation-seeking with an extended twin design. *Behavior Genetics*, 36(2), 229-237.
- Stokes, J. P., Damon, W., & McKirnan, D. J. (1997). Predictors of movement toward homosexuality: A longitudinal study of bisexual men. *The Journal of Sex Research*, 34(3), 304-312.
- Teuscher, U., & Teuscher, C. (2007). Reconsidering the double standard of aging: Effects of gender and sexual orientation on facial attractiveness ratings. *Personality and Individual Differences*, 42(4), 631-639.
- Thornhill, R. (1998). Darwinian aesthetics. In C. Crawford & D. Krebs (Eds.), *Handbook of Evolutionary Psychology: Ideas, Issues and Applications* (pp.543-572). Mahwah, NJ: Lawrence Erlbaum.

- Todd, P. M., Penke, L., Fasolo, B., & Lenton, A. P. (2007). Different cognitive processes underlie human mate choices and mate preferences. *Proceedings of the National Academy of Sciences, 104*(38), 15011.
- Trivers, R. L. (1985). *Social evolution*. Menlo Park, CA: Benjamin/Cummins Publishing Co.
- van Overveld, M., de Jong, P.J., Peters, M.L., & Schouten, E. (2011). The disgust scale r: A valid and reliable index to investigate separate disgust domains?. *Personality and Individual Differences, 51*(3), 325-330.
- Wiederman, M. W., & Dubois, S. L. (1998). Evolution and sex differences in preferences for short-term mates: Results from a policy capturing study. *Evolution and Human Behavior, 19*, 153-170.
- Wilson, G. D., Cousins, J. M., & Fink, B. (2006). The CQ as a predictor of speed-date outcomes. *Sexual and Relationship Therapy, 21*(2), 163-169.
- Wyatt, G. E., Williams, J. K., & Myers, H. F. (2008). African-American sexuality and HIV/AIDS: Recommendations for future research. *Journal of the National Medical Association, 100*(1), 44-51.
- Zuckerman, M. (1994). *Behavioral expressions and biosocial bases of sensation-seeking*. New York, NY: Cambridge University Press.
- Zuckerman, M. (2007). Sensation-seeking. In M. Zuckerman (Ed.), *Sensation-seeking and risky behavior*. (pp. 3-49). Washington, DC: American Psychological Association.
- Zuckerman, M. (2007). The Sensation-Seeking Scale V (SSS-V): Still reliable and valid. *Personality and Individual Differences, 43*, 1303-1305.

APPENDIX A

Interest and Preference Test
Sensation Seeking Scale Form V

Directions: Each of the items below contains two choices, A and B. Please indicate (circle) on your answer sheet which of the choices most describes your likes or the way you feel. In some cases you may find items in which both choices describe your likes or feelings. Please choose the one which better describes your likes or feelings.

In some cases you may find items in which you do not like either choice. In these cases mark the choice you dislike least. Please try to answer each item.

It is important you respond to all items with only one choice, A or B. We are interested only in your likes or feeling, not in how others feel about these things or how one is supposed to feel. There are no right or wrong answers as in other kinds of tests. Be frank and give your honest appraisal of yourself.

1. A. I like “wild” uninhibited parties
 B. I prefer quiet parties with good conversation
2. A. There are some movies I enjoy seeing a second or even a third time
 B. I can’t stand watching a movie that I’ve seen before
3. A. I often wish I could be a mountain climber
 B. I can’t understand people who risk their necks climbing mountains
4. A. I dislike all body odors
 B. I like some for the earthly body smells
5. A. I get bored seeing the same old faces
 B. I like to comfortable familiarity of everyday friends
6. A. I like to explore a strange city or section of town by myself, even if it means getting lost
 B. I prefer a guide when I am in a place I don’t know well
7. A. I dislike people who do or say things just to shock or upset others
 B. When you can predict almost everything a person will do and say he or she must be a bore
8. A. I usually don’t enjoy a movie or play where I can predict what will happen in advance
 B. I don’t mind watching a movie or a play where I can predict what will happen in advance
9. A. I have tried marijuana or would like to

- B. I would never smoke marijuana
- 10. A. I would not like to try any drug which might produce strange and dangerous effects on me
 - B. I would like to try some of the new drugs that produce hallucinations
- 11. A. A sensible person avoids activities that are dangerous
 - B. I sometimes like to do things that are a little frightening
- 12. A. I dislike “swingers” (people who are uninhibited and free about sex)
 - B. I enjoy the company of real “swingers”
- 13. A. I find that stimulants make me uncomfortable
 - B. I often like to get high (drinking liquor or smoking marijuana)
- 14. A. I like to try new foods that I have never tasted before
 - B. I order the dishes with which I am familiar, so as to avoid disappointment and unpleasantness
- 15. A. I enjoy looking at home movies or travel slides
 - B. Looking at someone’s home movies or travel slides bores me tremendously
- 16. A. I would like to take up the sport of water skiing
 - B. I would not like to take up water skiing
- 17. A. I would like to try surf boarding
 - B. I would not like to try surf boarding
- 18. A. I would like to take off on a trip with no preplanned or definite routes, or timetable
 - B. When I go on a trip I like to plan my route and timetable fairly carefully
- 19. A. I prefer the “down to earth” kinds of people as friends
 - B. I would like to make friends in some of the “far out” groups like artists or “punks”
- 20. A. I would not like to learn to fly an airplane
 - B. I would like to learn to fly an airplane
- 21. A. I prefer the surface of the water to the depths
 - B. I would like to go scuba diving
- 22. A. I would like to meet some persons who are homosexual (men or women)
 - B. I stay away from anyone I suspect of being “gay or lesbian”
- 23. A. I would like to try parachute jumping
 - B. I would never want to try jumping out of a plane with or without a parachute
- 24. A. I prefer friends who are excitingly unpredictable
 - B. I prefer friends who are reliable and predictable
- 25. A. I am not interested in experience for its own sake
 - B. I like to have new and exciting experiences and sensations even if they are a little

frightening, unconventional, or illegal

26. A. The essence of good art is in its clarity, symmetry of form and harmony of colors
B. I often find beauty in the “clashing” colors and irregular forms of modern paintings
27. A. I enjoy spending time in the familiar surroundings of home
B. I get very restless if I have to stay around home for any length of time
28. A. I like to dive off the high board
B. I don’t like the feeling I get standing on the high board (or I don’t go near it at all)
29. A. I like to date members of the opposite sex who are physically exciting
B. I like to date members of the opposite sex who share my values
30. A. Heavy drinking usually ruins a party because some people get loud and boisterous
B. Keeping the drinks full is the key to a good party
31. A. The worst social sin is to be rude
B. The worst social sin is to be a bore
32. A. A person should have considerable sexual experience before marriage
B. It’s better if two married persons begin their sexual experience with each other
33. A. Even if I had the money I would not care to associate with flight rich persons like those in the “jet set”
B. I could conceive of myself seeking pleasures around the world with the “jet set”
34. A. I like people who are sharp and witty even if they do sometimes insult others
B. I dislike people who have their fun at the expense of hurting the feelings of others
35. A. There is altogether too much portrayal of sex in movies
B. I enjoy watching many of the “sexy” scenes in movies
36. A. I feel best after taking a couple of drinks
B. Something is wrong with people who need liquor to feel good
37. A. People should dress according to some standard of taste, neatness, and style
B. People should dress in individual ways even if the effects are sometimes strange
38. A. Sailing long distances in small sailing crafts is foolhardy
B. I would like to sail a long distance in a small but seaworthy sailing craft
39. A. I have no patience with dull or boring persons
B. I find something interesting in almost every person I talk to
40. A. Skiing down a high mountain slope is a good way to end up on crutches
B. I think I would enjoy the sensations of skiing very fast down a high mountain

APPENDIX B

Please indicate how much you agree with each of the following statements, or how true it is about you. Please write a number (0-4) to indicate your answer:

- 0** = Strongly disagree (very untrue about me)
- 1** = Mildly disagree (somewhat untrue about me)
- 2** = Neither agree nor disagree
- 3** = Mildly agree (somewhat true about me)
- 4** = Strongly agree (very true about me)

1. I might be willing to try eating monkey meat, under some circumstances.
2. It would bother me to be in a science class, and to see a human hand preserved in a jar.
3. It bothers me to hear someone clear a throat full of mucous.
4. I never let any part of my body touch the toilet seat in public restrooms.
5. I would go out of my way to avoid walking through a graveyard.
6. Seeing a cockroach in someone else's house doesn't bother me.
7. It would bother me tremendously to touch a dead body.
8. If I see someone vomit, it makes me sick to my stomach.
9. I probably would not go to my favorite restaurant if I found out that the cook had a cold.
10. It would not upset me at all to watch a person with a glass eye take the eye out of the socket.
11. It would bother me to see a rat run across my path in a park.
12. I would rather eat a piece of fruit than a piece of paper
13. Even if I was hungry, I would not drink a bowl of my favorite soup if it had been stirred by a used but thoroughly washed flyswatter.
14. It would bother me to sleep in a nice hotel room if I knew that a man had died of a heart attack in that room the night before.

How disgusting would you find each of the following experiences? Please write a number (0-4) to indicate your answer:

- 0** = Not disgusting at all
- 1** = Slightly disgusting
- 2** = Moderately disgusting
- 3** = Very disgusting
- 4** = Extremely disgusting

15. You see maggots on a piece of meat in an outdoor garbage pail.
16. You see a person eating an apple with a knife and fork
17. While you are walking through a tunnel under a railroad track, you smell urine.
18. You take a sip of soda, and then realize that you drank from the glass that an acquaintance of yours had been drinking from.
19. Your friend's pet cat dies, and you have to pick up the dead body with your bare hands.
20. You see someone put ketchup on vanilla ice cream, and eat it.
21. You see a man with his intestines exposed after an accident.

22. You discover that a friend of yours changes underwear only once a week.
23. A friend offers you a piece of chocolate shaped like dog-doo.
24. You accidentally touch the ashes of a person who has been cremated.
25. You are about to drink a glass of milk when you smell that it is spoiled.
26. As part of a sex education class, you are required to inflate a new unlubricated condom, using your mouth.
27. You are walking barefoot on concrete, and you step on an earthworm.

APPENDIX C

M5-50 Questionnaire						Page 2
		Inaccurate	Moderately Inaccurate	Neither	Moderately Accurate	Accurate
1	Have a vivid imagination	0	0	0	0	0
2	Believe in the importance of art	0	0	0	0	0
3	Seldom feel blue	0	0	0	0	0
4	Have a sharp tongue	0	0	0	0	0
5	Am not interested in abstract ideas	0	0	0	0	0
6	Find it difficult to get down to work	0	0	0	0	0
7	Panic easily	0	0	0	0	0
8	Tend to vote for liberal political candidates	0	0	0	0	0
9	Am not easily bothered by things	0	0	0	0	0
10	Make friends easily	0	0	0	0	0
11	Often feel blue	0	0	0	0	0
12	Get chores done right away	0	0	0	0	0
13	Suspect hidden motives in others	0	0	0	0	0
14	Rarely get irritated	0	0	0	0	0
15	Do not like art	0	0	0	0	0
16	Dislike myself	0	0	0	0	0
17	Keep in the background	0	0	0	0	0
18	Do just enough work to get by	0	0	0	0	0
19	Am always prepared	0	0	0	0	0
20	Tend to vote for conservative political candidates	0	0	0	0	0
21	Feel comfortable with myself	0	0	0	0	0
22	Avoid philosophical discussions	0	0	0	0	0
23	Waste my time	0	0	0	0	0
24	Believe that others have good intentions	0	0	0	0	0
25	Am very pleased with myself	0	0	0	0	0
26	Have little to say	0	0	0	0	0
27	Feel comfortable around other people	0	0	0	0	0
28	Am often down in the dumps	0	0	0	0	0
29	Do not enjoy going to art museums	0	0	0	0	0
30	Have frequent mood swings	0	0	0	0	0
31	Don't like to draw attention to myself	0	0	0	0	0
32	Insult people	0	0	0	0	0
33	Have a good word for everyone	0	0	0	0	0
34	Get back at others	0	0	0	0	0
35	Carry out my plans	0	0	0	0	0
36	Would describe my experiences as somewhat dull	0	0	0	0	0
37	Carry the conversation to a higher level	0	0	0	0	0
38	Don't see things through	0	0	0	0	0
39	Am skilled in handling social situations	0	0	0	0	0
40	Respect others	0	0	0	0	0

41	Pay attention to details	0	0	0	0	0
42	Am the life of the party	0	0	0	0	0
43	Enjoy hearing new ideas	0	0	0	0	0
44	Accept people as they are	0	0	0	0	0
45	Don't talk a lot	0	0	0	0	0
46	Cut others to pieces	0	0	0	0	0
47	Make plans and stick to them	0	0	0	0	0
48	Know how to captivate people	0	0	0	0	0
49	Make people feel at ease	0	0	0	0	0
50	Shirk my duties	0	0	0	0	0
		Inaccurate	Moderately Inaccurate	Neither	Moderately Accurate	Accurate

APPENDIX D



- Sex: Female
- Interested in relationships with: Men
- Age: 24
- Education: Master's degree from Clemson University
- Occupation: Marketer
- Salary: \$40,000
- Automobile: Toyota Camry
- Religion: Christian
- Political Affiliation: Democrat



- Sex: Female
- Interested in relationships with: Men and Women
- Age: 24
- Education: Master's degree from the University of Pennsylvania
- Occupation: Business Administrator
- Salary: \$40,000
- Automobile: Nissan Maxima
- Religion: Christian
- Political Affiliation: Democrat



APPENDIX E



- Sex: Male
- Interested in relationships with: Women
- Age: 27
- Education: Master's degree from George Washington University
- Occupation: Therapist
- Salary: \$55,000
- Automobile: Mercedes-Benz E-Class
- Religion: Christian
- Political Affiliation: Democrat



- Sex: Male
- Interested in relationships with: Women and Men
- Age: 27
- Education: Master's degree from Columbia University
- Occupation: Counselor
- Salary: \$55,000
- Automobile: BMW 5-Series
- Religion: Christian
- Political Affiliation: Democrat



APPENDIX F

Informed Consent Ratings of Perceived Physical and Sexual Attractiveness

What is the purpose of this research?

The purpose of this research is to examine how individuals differ in their ratings of physical attractiveness, as well as ratings of sexual interest based on attraction. The research examines the relationships that exist amongst personality traits and individual differences in attraction.

What will be expected of me?

You will be asked to complete a personality inventory, sensation seeking inventory, and to answer questions related to personal attitudes. You will be shown a series of photos and brief corresponding biographical profiles of individuals. After viewing the photo and profiles you will then be asked to rate the photo in terms of physical and sexual attractiveness.

How long will the research take?

It is anticipated that your participation in the study will take approximately 20 minutes.

How will you use my information?

The information you provide will be confidential. Your personal information will not be shared. The data gathered will be compiled into groups for academic purposes only, and the possibility exists that the research may be presented in scholarly articles or conference presentations. However, no identifying information will be used.

Can I withdraw from the study if I decide to?

Your participation in this study is completely voluntary. It is your right to withdraw from the study at any time after agreeing to participate. Should you choose to withdraw from the study, you have the right to request that your data provided not be used. If you decide to withdraw from the study, there are no consequences following your personal choice to decline participation.

Is there any harm that I might experience from taking part in the study?

There are no foreseeable risks to you involved in this study.

How will I benefit from taking part in the research?

You will receive extra credit in your class for your participation in this study. Additionally, by participating in this study you are contributing to the field of psychology

in regard to the expansion of knowledge on how individuals differ in perceptions of attractiveness.

Who should I contact if I have questions or concerns about the research?

Contact me James McAbee at jlmcabee@email.wcu.edu. You can also contact Dr. Herzog, faculty director of the project, at herzog@email.wcu.edu. If you have concerns about your treatment as a participant in this study, contact the chair of WCU's Institutional Review Board through the office of Research Administration at WCU (828-227-7212).

Please select (click) one of the following options below:

I AGREE I DISAGREE to participate in this research study.

Upon agreeing to participate in the study, I am providing my BannerID below to receive credit for my participation in this research study. I fully understand my rights of confidentiality and that the number is for identification of participation only and will not be disclosed beyond the aforementioned purpose.

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