ASSESSING ATTITUDES TOWARDS BISEXUALS AND BISEXUALITY

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By

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ABSTRACT

This study explored the relationship between contact, global awareness, and attitudes towards bisexuality. The primary purpose of this study was to investigate whether self-reported exposure to bisexuals is related to more positive self-reported attitudes towards bisexuals. Regression analyses revealed no significant relationship between exposure and attitude formation. This study also addressed the relationship between global knowledge and attitudes towards bisexuality. Analyses found no significant relationship between global awareness and attitude formation. Analyses found a significant difference between male and female participant attitudes towards bisexuality: females reported more positive attitudes. A significant difference was also found between attitudes towards female bisexuality and male bisexuality: female bisexuality was rated more positively. Explanation of the results and implications for future research are discussed.
Dedicated to El Fathero, Grama Fambro, and Aunt Janet
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CHAPTER 1

INTRODUCTION

The importance of research on attitudes towards bisexuality is explained by the fact that so little exists on the topic. In terms of sexual orientation, a plethora of research is present in journal articles on "lesbian, gay, and bisexual" issues, but the "bisexual" aspect in these articles is often marginalized, receiving little to no mention in the experimental design, as well as in the discussion of research implications. As research has recognized the need for studies of and for special populations, the assumption that bisexuality is similar to homosexuality, and can be explained with the same lexicon as homosexuality, is dated in thought and erroneous in experimental reality (Eliason, 1997; Fox, 1996; Hutchins, 1996; Mohr & Rochlen, 1999; Ochs, 1996; Queen, 1996).
Although the field of psychology has witnessed an increase in the number of books, chapters, and articles on general bisexual issues, there is still much that needs to be addressed in the area of attitudes towards the bisexual community. It is necessary to address and research topics concerning heterosexual and homosexual attitudes about bisexuality, as this is crucial to understanding the social implications of being bisexual, as well as gathering further information with which to develop more culturally aware and effective treatment: both physical and mental (Firestein, 1996; Guidry, 1999; Hall, 1997; Klein, 1993; Matteson, 1996; Mohr & Rochlen, 1999; Ochs, 1996).

Generally, individuals take those small numbers of experiences, or exposures, and apply them to the larger population. Consequently, preconceived attitudes, without any exposure (or with a few negative experiences), may negatively affect the formation of attitudes. Thus far, research on attitudes towards social and ethnic minorities has demonstrated the importance of prior conscious exposure and contact in the reduction of prejudice or stereotypic responses in individuals. In addition, large amounts of
exposure to cultures different from our own appear to contribute to more multicultural and communicative competency (Cotten-Huston & Waite, 2000; Eliason, 2000; Gelso & Fretz, 1992; Herek, 2000; Herek & Capitanio, 1996; Matsumoto, 2000; Millar & Millar, 1996; Ponterotto et al., 1995; Ponterotto et al., 2000; Sue, Ivey & Pedersen, 1996; Sue & Sue, 1999, Wilcox, 1996).

The primary purpose of this study was to investigate whether general exposure to bisexuals (both indirect and direct) has a significant effect on heterosexuals’ attitudes towards bisexuals. To address this particular question, participants responded to scales that assessed their exposure to bisexuals as well as their present day attitudes towards male and female bisexuality. By analyzing the male/female sub-scales of the Attitudes Regarding Bisexuality Scale, we explored whether there was a significant difference in attitudes towards bisexual males versus bisexual females. Differences in the gender of participants were assessed to determine whether males and females have different attitudes towards bisexuals and bisexuality.
Secondly, this study examined whether an individual’s fact-based global awareness had a significant effect on their attitudes towards bisexuals and bisexuality. Currently, global knowledge has not been addressed in terms of its possible influence on attitude formation. My experience has been that more culturally aware persons (via foreign language study, travel, coursework based on international issues, etc.) tend to have more positive attitudes towards cultural diversity and different social/ethnic communities. To answer the question of global knowledge and attitude formation, participants responded to a profile that measured their factual global knowledge and a scale that assessed their current attitudes towards bisexuality. Responses were assessed to see if there was a significant relationship between global awareness scores and attitudes.
CHAPTER 2

LITERATURE REVIEW

Attitudes Towards Bisexuality

In 1997, Spalding and Peplau conducted a study of heterosexual perceptions of bisexuality. Rather than creating a measure, they presented subjects with descriptions of couples, varying the sexual orientations of the partners (bisexual, heterosexual or homosexual). Subjects were then asked to rate the partners along five specific themes: monogamy, sexual riskiness, trust, sexual talent, and relationship quality. Although bisexual partners were viewed as having equally positive relationships as heterosexual partners, participants also reported stereotypic attitudes towards bisexuals (e.g., "bisexuals are more promiscuous," "bisexuals are more likely to cheat on a partner"). Results indicated
that bisexuals were not viewed the same as homosexual and heterosexual partners. Surprisingly, the results neither indicated a participant gender effect on ratings of bisexual partners nor a difference in perceptions of bisexual women versus men. The lack of gender effects and perception differences is unusual given the amount of research on attitudes towards homosexuality and bisexuality, which *have* found these effects (Eliason, 1997; Herek, 1988; Herek, 1994; Mohr, 2001; Mohr & Rochlen, 1999; Sampson, 2001).

Eliason (1997) obtained somewhat similar, albeit different, results in her research comparing the biphobic and homophobic attitudes and behaviors of heterosexuals. Eliason had subjects indicate the degree to which they agreed with stereotypic statements about lesbians, gays and bisexuals. She found a strong correlation between biphobia and homophobia. However, attitudes about homosexuality were not as negative as those attitudes concerning bisexuality. In addition, attitudes regarding male bisexuality were far more negative than attitudes regarding female bisexuality. Thus, as with Spalding and Peplau's findings, heterosexuals perceive and
evaluate homosexuality and bisexuality differently. Eliason’s study is important because it used more explicit “attitudes” assessment rather than relying on a participants’ interpretation of a scenario or ambiguous stimuli. While one may posit that an individual’s attitudes will play a role in how they interpret a situation, it is the attitudes themselves that are of current empirical interest.

Expanding on Eliason’s study of biphobia, Mohr and Rochlen (1999) conducted a slightly different study to evaluate attitudes. They assessed both heterosexual and homosexual attitudes towards bisexuality. In their Attitudes Regarding Bisexuality Scale construction study, Mohr and Rochlen sought to document attitudes regarding bisexuality using heterosexual and homosexual populations in their sample. The initial focus of their 80-item scale was based on three domains: tolerance, legitimacy of bisexuality as a sexual orientation, and perceptions of bisexual reliability in relationships.

In general, the results were more positive than research pursued in earlier decades (e.g., belief in bisexuality as a valid orientation; reliability of bisexuals in relationships, etc.); however,
many of the stereotypic attitudes remained (e.g. bisexuals are more likely to cheat on a partner). Analyses also found female bisexuality to be rated more favorably than male bisexuality. In addition, female participants reported more positive attitudes regarding bisexuality than their male counterparts (Eliason, 1997; Haddock, Zanna & Esses, 1993; Herek, 1988; Sampson, 2001; Udis-Kessler, 1996).

Possible reasons for the different attitudes toward male and female bisexuals is the fact that male homosexuality and male homosexual acts have always been viewed more negatively by the public, fostered by general homophobic attitudes, which translate to [male] biphobic attitudes. Negative past experiences in relationships with persons who were bisexual may also be contributing to more negative scores for male bisexuality. Moreover, general biphobic lesbian/gay attitudes (e.g., “bisexuals are hurting the gay cause”) may be adding to the negative ratings of male bisexuality (Blumstein & Schwartz, 1977; Hutchins, 1996; Ochs, 1996; Otchet, 1997; Rust, 1996).

In terms of gender response difference, historically, research on attitudes towards homosexuality has consistently found a gender
response discrepancy. In his development of the Attitudes Toward Lesbian and Gay Men (ATLG) scale, Herek (1988) obtained a gender difference for heterosexual attitudes toward homosexuality. Heterosexual men were more likely to display more negative attitudes towards homosexuality than heterosexual females. Moreover, heterosexual male attitudes were more negative for gay males rather than lesbians, while their female counterparts displayed no significantly different attitudes between gay men and lesbians.

It is possible that heterosexual women are not as likely to feel threatened by homosexual behavior as heterosexual males because they do not suffer the same pressures in terms of sex role socialization (e.g., heterosexual males feeling compelled to "assert one's masculinity"). In terms of understanding the bisexual experience, Mohr and Rochlen's study is critical because it not only looks at heterosexual attitudes, but also homosexual attitudes regarding bisexuals and bisexuality, as bisexuals are victims of biphobic attitudes from homosexuals as well as heterosexuals.
Blumstein and Schwartz's (1977) study of bisexuality and social psychological issues addresses the role that gay biphobia may play in bisexual identity. Citing Kinsey (1948) and his work on sexuality, they reiterated Kinsey's beliefs that sexuality should be seen as a continuum rather than a rigidly defined categorical construct and suggest the term "ambisexual" to acknowledge this fluidity. One of the surprising results of this study was that subjects labeled themselves based on the sexual relationship they were in at that present time, or based on outside pressure in their social networks. Both men and women were more likely to identify as homosexual if they had strong ties to the gay community, as compared to participants with little or no contact with the gay community. A number of the participants active in the gay community reported that they felt they would not be supported by the gay community if they identified as bisexual or started a "heterosexual" relationship.

This labeling phenomenon has very important ramifications when we are considering participants in our studies of bisexuality, as a person may be behaviorally bisexual over time, but, as with
Blumstein and Schwartz (1977), cognitively label themselves according to present-day situations. In addition, undefined labeling brings into focus the question regarding the assessment of out-group attitudes towards bisexuals, as out-group members may not be aware that they have had exposure to, or interacted with, bisexuals. Moreover, this categorization issue brings to light the concern in bisexual research that studies on lesbians and gay males are either inadvertently or purposely using bisexuals as part of their homosexual subject pool. One limitation of most studies on homosexuality is the use of inaccurate labeling. It is imperative, if we are to have true empirical research, that studies give explicit definitions of sexuality to their participants and include these definitions in their publications (Berkey, Perelman-Hall & Kurdek, 1990; Blumstein & Schwartz, 1977; Klein, Sepekoff & Wolf, 1985; Lever, Kanouse, Rogers and Hertz, 1992; McKirnan, Stokes, Doll & Burzette, 1995; Rogers & Turner, 1991; Ross & Paul, 1992).
Exposure and Interaction Effects on Attitude Formation

According to Allport's contact hypothesis (1954, 1979), cooperative contact with individuals of an out-group can foster more positive attitudes (e.g., reducing intergroup prejudice and increasing tolerance) towards the out-group as a whole. A number of studies have been conducted to test this theory and its derivatives, using various stigmatized groups as the out-group focus.

Ellis and Vasseur (1993) conducted a mock interview experiment to assess the role that prior contact may have in attitudes towards lesbians and gay males. Participants were prescreened to assess the number of lesbians/gay males they knew, the type of relationship they had with those individuals, and how they would assess their association with that person.

The study required that participants read job applicant resumes, with some of the resumes including lesbian/gay related information in the "activities and honors" section to suggest the sexual orientation of the applicant. Participants were given a series of 30 questions to choose from to interview the applicant.
Researchers rated these questions as positive, neutral, or negative and noted the questions chosen by participants to ask the applicants.

Results indicated that participants with little to no prior direct/interpersonal exposure to homosexuals had more negative attitudes towards lesbians and gay males than those with more exposure to homosexuals, thereby supporting Allport's theory. In addition, they tended to choose more negative questions if the applicant's resume indicated a lesbian/gay sexual orientation. Research findings indicated that persons having more contact with gay males or lesbians are more likely to hold more positive attitudes towards homosexuality.

Bowen and Bourgeois (2001) also found supporting evidence of the exposure/contact hypothesis. Dormitory residents were interviewed to assess their level of comfort and tolerance of lesbian, gay, and bisexual students. Analyses revealed that students living on the same floor or in the same residence with lesbian, gay or bisexual students were more likely to demonstrate positive attitudes towards lesbian, gay, and bisexual students. A strength of this study is that it
assesses individuals’ comfort/perceptions of homosexual or bisexual persons, rather than simply asking for “quality of experience” ratings of their interactions. While certain studies have found statistical relevance for quality ratings of other social minorities, quality ratings of homosexual contact has had inconsistent results (Maras, 2000; Schwartz & Simmons, 2001; Singer, 1998).

Sampson (2001) found that self-reported quality ratings of exposure had little statistical significance in his study assessing college-age students’ attitudes towards homosexuals. Participants completed questionnaires assessing their levels of exposure and their attitudes towards lesbians and gay men. Results indicated that students with more direct contact, rather than indirect contact (e.g., television, internet, stories), tended to have more positive attitudes towards lesbians and gay males.

One explanation for the lack of significance of indirect contact may be that it is harder to quantify. Persons with negative attitudes towards homosexuality are less likely to watch programs featuring lesbian/gay characters, visit web pages on lesbian/gay issues, read articles on lesbian/gay personalities or actively remember ads
featuring gay persons, unless the ad employs stereotypic type-casting of homosexuals. As such, these individuals probably are unable to accurately answer questions addressing their indirect exposure.

A more effective way to assess the interaction between indirect contact and attitudes may be to expose the participant in the experimental setting. By using this “exposure” experimental design, Riggle, Ellis and Crawford (1996) found that media, or indirect, contact had a significant effect on attitude formation. Students completed a pre-test survey assessing their attitudes towards homosexuality. Selected students then watched a documentary on the life of well-known, and respected, gay politician, Harvey Milk. Following the film, students then completed the Attitudes Toward Homosexuals Scale. Comparisons between the pre and post-test surveys indicated a positive effect on attitudes towards homosexuals, indicating the possible significance of indirect contact on attitude formation.

The main limitation of this study is that it measured short-term effects of exposure. Moreover, a follow-up study was not
conducted to see if immediate media contact has any long-term effect on attitude formation. Another possible limitation is that the stimulus used is overwhelmingly positive. As a result, it is hard to truly distinguish whether the results are due to the participants’ positive attitudes towards “a gay politician” or if the results are due to participants’ positive attitudes towards “a well-respected, down-to-earth, for the people, politician.”

While direct contact is more tangible in quantitative assessment, we believe that indirect contact may prove to be significant in predicting attitudes. However, little empirical data exists that explores the role that indirect contact may play in attitude formation.

*Global and Cultural Awareness*

Just as exposure to out-group members has an effect on attitudes towards that group, research on awareness has found that individuals with more global/cultural knowledge tend to have more positive attitudes and interactions with people from communities differing from their own. In light of the impending globalization of
our world community, Marshall (1980) voiced concern about American high school students’ inability to pass a basic global awareness test.

Moreover, a recent article in *USA Today* (Henry, 2002) indicated that American high school students are still behind in education, with less than 35% performing at the basic level on the 2001 U.S. History Report Card, a test developed by the Department of Education to assess high school senior’s knowledge of American history. Though not an explicit assessment of world knowledge, education plays an important part in determining the types of information we receive and our attitudes towards others. If American high school students are performing at an “abyssmal level” on U.S. history exams, what is the likelihood that they are learning, or even being exposed to, the histories and cultures of other nations (Henry, 2002)?

Najafizadeh and Mennerick (1992) noted the lack of attention given to Third-World countries in introductory sociology textbooks. A content analysis of 22 introductory texts revealed that most employed a Eurocentric/Western focus, centering most of the text
on industrialized nations. In contrast, Third-World nations were either ignored or received marginal recognition, at best, in these textbooks. The researchers voiced concern about the lack of information students were receiving and thus, being unprepared to deal with issues facing diverse communities, specifically those in developing countries.

Identifying the importance of education and global awareness in working with diverse communities, Corbitt (1998) developed the Global Awareness Profile as an assessment and intervention tool for increasing global and cultural awareness. Since its development, the Global Awareness Profile has been used in countless cultural training programs as well as academic courses to better train and to educate individuals. Many courses, both undergraduate and graduate level, have used the instrument on the first day of class as a form of pre-course assessment tool. Qualitative feedback forms and reports from these training sessions or courses reveal that individuals feel more communicatively competent with persons from other background and more open to new philosophies, opinions, approaches, and solutions to problems.
In many cases, and in my experience, individuals achieving advanced degrees are more likely to have interacted with persons from diverse backgrounds as well as being exposed to new ideas and perspectives, simply by nature of having attended a college or university. In terms of education/cultural awareness and attitude development, studies of attitudes toward homosexuality have found that older and younger adults, individuals having less educated backgrounds, having parents with lower levels of education, and persons living in Midwestern or Southern states, and/or rural areas, were more likely to have negative responses toward homosexuality, suggesting the importance of education in attitudes formation (Herek, 1988; Herek, 1994; Marsiglio, 1993; Simoni, 1996).

Mirroring the interaction between education and attitudes towards homosexuality, the positive result of cultural education and active awareness is that it may help reduce the likelihood of cultural stereotyping and discriminatory behavior. Individuals will feel better equipped to negotiate their differing senses of self with persons from other communities.
Tensions between people of different cultural/ethnic backgrounds may be alleviated by sincerely and truly valuing another person’s background, culture, and identity (Hirose, 1998; Kimmel, 2000; Hunter, 1999; Rodriguez & Walls, 2000).

The purpose of this study was to explore the relationship between exposure, global awareness and attitudes towards bisexuals. The specific hypotheses addressed in this study were as follows:

1. Persons scoring higher on the Exposure to Bisexuals Scale (EBS) will self-report more positive attitudes towards bisexuals and bisexuality.

2. Persons scoring higher on the Global Awareness Profile (GAP) will self-report more positive attitudes towards bisexuals and bisexuality.

3. Heterosexual female participants will have more positive attitudes towards bisexuals/bisexuality than their male counterparts.

4. Female bisexuality will be rated more favorably than male bisexuality.
CHAPTER 3

METHOD

Participants

An initial sample of 283 introductory psychology course students participated in this research for class credit. Because the study assessed the attitudes of individuals towards bisexuals, one self-reported bisexual and 11 self-reported bisexual-heterosexual students were excluded from analyses. The final sample consisted of 263 students. Participation by the students was completely voluntary and confidential. Participants were given the option to discontinue participation at any time without losing credit. Following completion of the survey, each student was given a debriefing sheet about the nature of the study and was thanked for their participation.
Demographics

The age for the sample ranged from 17-42 years ($M=19.24$ years, mode=18 years). The sample consisted of 144 females (54.8%) and 119 males (45.2%). In terms of academic year, 68.4% ($n=180$) were freshmen, 15.6% ($n=41$) were sophomores, 10.6% ($n=28$) were juniors, 3.8% ($n=10$) were seniors, 1.5% ($n=4$) were in the “other” category. The ethnic background of the participants were as follows: 1.9% ($n=5$) Latino/a, 7.6% ($n=20$) Asian/Asian-American, 74.1% ($n=195$) European-American, 10.3% ($n=27$) African-American, 3.1% ($n=8$) Indigenous/Native-American, 1.1% ($n=3$) Other, 1.6% ($n=4$) Non-Native American Biracial, and one person did not complete this question.

The modal household income was $66,676 and above. The hometown descriptions of the participants were 24.7% ($n=65$) rural, 20.9% ($n=55$) urban, 50.2% ($n=132$) suburban, 3.8% ($n=10$) other, and one participant did not complete this question. Religious orientation was assessed via a write-in option. A total of 80.2% ($n=211$) indicated a religious/spiritual orientation while 19.8% ($n=52$) did not. Of the participants, 95.4% ($n=251$) were U.S.
citizens while 4.6% \((n=12)\) indicated they were not U.S. citizens. The sexual orientation of the participants was reported as 0.8% \((n=2)\) lesbian/gay and 99.2% \((n=261)\) heterosexual.

**Measures**

*Demographic questionnaire.* All participants were asked for the following demographic information: gender, age, major, religious/spiritual orientation, racial/ethnic identity, citizenship, household income, year in school, parents’ marital status, number in household, hometown, and sexual orientation (see Appendix A).

*Attitudes Regarding Bisexuality Scale.* The Attitudes Regarding Bisexuality Scale (ARBS) is an 18-item instrument designed to assess attitudes towards bisexuality on two domains: tolerance and stability. Tolerance is defined as an acceptance of bisexuality in terms of sexual practices (e.g., “Bisexual men are sick”). Stability is measured using questions regarding the perceived legitimacy of bisexuality as a sexual orientation and the perceived reliability of bisexuals in committed relationships (e.g., “Bisexuals have a fear of committed intimate relationships”).
The ARBS estimated internal consistency coefficients for the subscales are Stability, .92 and a .91 on Tolerance. (Mohr & Rochlen, 1999). Due to interest in general attitudes towards bisexuality, the total score on the ARBS were used for our statistical analysis, rather than employing the subscales. Responses may range from 1 to 90 points total. For our test sample (n=100), the coefficient alpha for the total ARBS was .90 (see Appendix B).

*Global Awareness Profile.* The Global Awareness Profile (GAP: Corbitt, 1998) is a multiple-choice awareness inventory to assess a person's global knowledge. It was developed as a pre-intervention inventory to focus attention on increasing knowledge and expanding global awareness. By expanding global and cultural awareness, Corbitt asserted that an individual increases his or her communicative competency with people who are different from self and those individuals from around the world.
The GAP, in its original form, is a 120-item inventory with a test-retest reliability estimate over a three-week period of .83. Attempts to ascertain further psychometric properties have been difficult as the GAP, while used in qualitative assessments, has not been used in quantitative research pursuits.

Given the realistic time constraints of studies employing introductory psychology students, the scale was shortened to 30 questions, assessing more general world knowledge (e.g. "What international organization monitors human rights abuses around the world?" "What is the capital of Canada?"). Twelve individuals were asked to take the 120-item GAP and then met as a group to review the GAP items and to shorten the scale.

The group consisted of recent college graduates (one to four years since matriculation), five women and seven men. The racial/ethnic breakdown of the group is as follows: Three Latino/as, three African-Americans, three Asian-Americans, and three European-Americans. Feedback from these individuals was used to revise the original item pool by removing questions that did not fit the criteria: 1) questions should assess general global knowledge,
2) questions should be age appropriate (i.e., current undergraduate college students should be able to answer the selected questions), and 3) requirement of a majority vote for an item’s inclusion in the final measure.

Items were included that were identified as assessing “global knowledge” in the GAP manual. Additional questions falling under the “age appropriate” criteria were selected based on a majority rule voting system. Items had to receive at least 7-8 votes, out of the twelve group members, for it to be included in the measure. For our test sample (n=100), the coefficient alpha for the reduced 30-item GAP was .68 (see Appendix C). Responses may range from 0 to 30 points total.

Exposure to Bisexuals Scale. The Exposure to Bisexuals Scale (EBS) is based on the Exposure to Gay Men and Lesbians Scale (EGLS: Sampson, 2001). Questions were modified to make them relevant to assessing bisexual exposure (i.e., changing “How often have you heard jokes about gays and/or lesbians?” to “How often have you heard jokes about bisexuals?”). The EBS is a 15-item scale designed to measure the amount of direct and indirect exposure the
participant has had to bisexuals. Using a 5-point Likert format, participants respond to questions assessing types of exposure as well as perceived quality of each exposure experience (e.g., “How often have you interacted with bisexuals at work?” “How often have you seen bisexuals on television?” “How would you rate this experience?”). For the EGLS, the reliability coefficient for direct exposure was .76, and .79 for perception of direct exposure. However, it is noted that altering the EGLS renders the psychometric properties for the measure inapplicable, for our study.

Discussion with the EGLS author revealed little statistical use for the “quality rating” aspect of the scale, thus quality ratings were not used in our statistical analyses. However, as previously mentioned, research has found effects for both direct and indirect contact (Bowen & Bourgeois, 2001; Eliason, 1997; Ellis & Vasseur, 1993; Herek, 1988, Riggle, Ellis, & Crawford, 1996; Sampson, 2001). Based on these studies, the total score on the EBS was used for our analyses. Responses may range from 0 to 75 points total. The coefficient alpha for the total EBS exposure scores in our sample ($n=100$) was .82 (see Appendix D).
Balanced Inventory of Desirable Responding. The Balanced Inventory of Desirable Responding (BIDR; Paulhaus, 1988) is a 40-item scale used to measure Self-Deceptive Positivity (SDE) and Impression Management (IM) in participant responses. Self-Deceptive Positivity is defined as the giving of self-reports that are factual, but are positively biased (e.g., "The reason why I vote is that my vote can make a difference"). Impression Management is defined as a deliberate attempt at presenting a belief or attitude that is in accordance with a given situation (e.g., "I always obey laws, even if I'm unlikely to get caught").

Items on the BIDR are rated using a 7-point scale. One point is added for each extreme response (6 or 7) after reversing the negatively keyed items. Total scores on the SDE and IM may range from 0 to 20. Thus, only subjects presenting extreme responses may attain a high score. All 40 items may be used to give an overall measure of socially desirable responding. The reported alpha for the summed measure is .83 (Robinson et al., 1991). For our test sample, the coefficient alpha for the total BIDR was .74 (see Appendix E).
Debriefing and Counseling Resource Sheet. Counseling

Resource information was included on the debriefing form and was distributed to the participants following their participation in the study. The purpose of the debriefing sheet is to provide participants with information about the purpose of the study as well as with locations of counseling services (see Appendix F).

Procedure

Each participant was given a questionnaire packet which included the Attitudes Regarding Bisexuality Scale (ARBS) first, the Global Awareness Profile (GAP) second, the Exposure to Bisexuals Scale (EBS) third, the Balanced Inventory of Desirable Responding (BIDR) fourth, and the demographic questionnaire fifth. All participants received packets arranged in this order as our primary research focus was on the ARBS, GAP and EBS.

The ARBS was administered first so that it would not be contaminated by responses given on the exposure scale, as the ARBS is based on attitudes and the EBS is a more fact-based scale. It was suspected that participants might alter their responses on the ARBS
if it followed the EBS. The GAP was administered second to better ensure completion of the survey as well as serving as a distracter variable between the ARBS and EBS. The BIDR was administered last as incomplete items resulted in removal from the sample. Participants’ responses were provided anonymously.

Following their completion of the packets, participants received a debriefing form which provided information about the experiment, resources for counseling, and listed the telephone number and email address where the primary researcher could be contacted, in case of further questions. The participants were administered the questionnaire in groups of 20-40 and were overseen by the primary investigator.
CHAPTER 4

RESULTS

As neither research existed to serve as a theoretical basis for a hierarchical regression, nor enough variables to merit the use of a stepwise regression, a simple multiple linear regression and t-tests were used to determine the effects of exposure and global awareness on attitudes towards bisexuality (Cohen & Cohen, 1983). The dependent measure was the participants’ responses on the Attitudes Regarding Bisexuality Scale (ARBS). The independent measures were: (a) participant responses on the Global Awareness Profile (GAP), (b) participant responses on the Exposure to Bisexuals Scale (EBS), and (c) gender of participants.
Preliminary Analyses

The initial sample consisted of 283 participants. The test sample used to evaluate instrument reliabilities was made up of the first 100 completed surveys received during the study. For the test sample as well as the total sample, participants’ data were screened for socially desirable responding using the total BIDR. Scores for this sample ranged from 0 to 30 \((M=10.15, SD=5.31)\). Participants with scores two standard deviations above the mean \((>21)\) were removed from the data. This procedure resulted in the elimination of eight students from the study. As previously mentioned, students self-reporting a “bisexual” or “heterosexual-bisexual” or “homosexual-bisexual” sexual orientation were removed from the study, excluding twelve students from the analyses. The final sample consisted of 263 students. Table 4.1 provides the Pearson Correlations for the independent variables used in the study. In the following section, the research hypotheses will be stated and results of the analysis presented.
Hypothesis 1 and 2

1. Persons scoring higher on the Exposure to Bisexuals Scale (EBS) will self-report more positive attitudes towards bisexuals and bisexuality.

2. Persons scoring higher on the Global Awareness Profile (GAP) will self-report more positive attitudes towards bisexuals and bisexuality.

A simple multiple linear regression analysis was conducted to evaluate how well global awareness and bisexual exposure predicted attitudes towards bisexuality. Table 4.2 provides the results of the multiple linear regression analyses of global knowledge and the effects of exposure on attitudes toward bisexuals. The predictors were the Global Awareness Profile and the Exposure to Bisexuals Scale, while the criterion variable was the Attitudes Regarding Bisexuality Scale. The linear combination of the GAP and EBS showed no relation to the ARBS, $F (2, 260) = .839$, $p = .433$, not significant. Thus, for our sample pool, neither Hypothesis 1 nor Hypothesis 2 were supported by our data.
Hypothesis 3

3. Female participants will self-report more positive attitudes towards bisexuals than their male counterparts.

Table 4.3 provides the descriptive statistics for all measures, including the ARBS. An independent-samples $t$-test was conducted to evaluate the hypothesis that females would have more positive attitudes towards bisexuals, than male participants. The mean for female participants was 59.56 ($SD = 13.84$), while the mean for male participants was 54.15 ($SD = 12.61$). The test results were significant, $t(261) = -3.27$, $p = .001$ (two-tailed), $d = .41$. Thus, confirmatory evidence was found to support Hypothesis 3: females have more positive attitudes towards bisexuality than male participants.
Hypothesis 4

4. Participants will report more positive attitudes towards female bisexuality than male bisexuality.

A paired-samples \( t \)-test was conducted to evaluate whether participants rated female bisexuality more positively than male bisexuality. Confirmatory evidence was found to support Hypothesis 4. The mean difference was 1.36 points between the two subscales. The results indicated that the mean for female bisexuality \((M = 20.01, SD = 4.76)\) was significantly greater than the mean for male bisexuality \((M = 18.65, SD = 4.84)\), \( t (262) = 6.87, p = .0001 \) (two-tailed), \( d = .42 \).
<table>
<thead>
<tr>
<th>Scale</th>
<th>ARBS</th>
<th>BIDR</th>
<th>EBS</th>
<th>GAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARBS</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIDR</td>
<td>-.04</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBS</td>
<td>.02</td>
<td>-.07</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>GAP</td>
<td>.07</td>
<td>.09</td>
<td>.00</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Table 4.1: Correlations between Scales; Attitudes Regarding Bisexuality Scale (ARBS), Balanced Inventory of Desirable Responding (BIDR), Exposure to Bisexuals Scale (EBS), Global Awareness Profile (GAP).
<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$F$</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBS</td>
<td>.006</td>
<td>.839</td>
<td>.002</td>
<td>.048</td>
<td>.028</td>
<td>.645</td>
</tr>
<tr>
<td>GAP</td>
<td>.006</td>
<td>.839</td>
<td>.244</td>
<td>.204</td>
<td>.075</td>
<td>.227</td>
</tr>
</tbody>
</table>

Table 4.2: Summary of Regression Analysis for Variables Predicting Attitudes Towards Bisexuals: Exposure to Bisexuals Scale (EBS) and Global Awareness Profile (GAP).
<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Males</th>
<th>Females</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARBS</td>
<td>119</td>
<td>144</td>
<td>54.15</td>
<td>59.56</td>
<td>12.61</td>
<td>13.84</td>
</tr>
<tr>
<td>EBS</td>
<td>119</td>
<td>144</td>
<td>66.74</td>
<td>64.57</td>
<td>16.80</td>
<td>18.02</td>
</tr>
<tr>
<td>BIDR</td>
<td>119</td>
<td>144</td>
<td>9.97</td>
<td>9.40</td>
<td>4.26</td>
<td>4.76</td>
</tr>
<tr>
<td>GAP</td>
<td>119</td>
<td>144</td>
<td>18.09</td>
<td>15.89</td>
<td>3.92</td>
<td>4.09</td>
</tr>
</tbody>
</table>

Table 4.3: Descriptive Statistics for Measures: Attitudes Regarding Bisexuality Scale (ARBS), Balanced Inventory of Desirable Responding (BIDR), Exposure to Bisexuals Scale (EBS), and Global Awareness Profile (GAP).
CHAPTER 5

DISCUSSION

The purpose of our study was to examine the relationship between exposure and attitudes towards bisexuals. In addition, the study sought to examine the relationship between global awareness and attitudes towards bisexuals. In terms of attitudes, we further sought to address any gender-biased attitudes toward bisexuals as well as assess the role that the participants' gender plays in overall attitudes. The results of the study provided support for two of the four hypotheses, while failing to confirm the other remaining hypotheses. Support or lack of support for given hypotheses will be discussed in the following section.
Study Limitations and Directions for Future Research

Our initial hypothesis that participants' exposure to bisexuals would play a role in their attitudes formation towards bisexuals was not confirmed by our sample data. The lack of confirmatory statistics to support this hypothesis is contrary to previous research results (Bowen & Bourgeois, 2001; Eliason, 1997; Herek, 1994, Sampson, 2001). One possible explanation is that students may not be aware that they are around or interacting with bisexuals. Many may be relying on stereotypic identifiers of non-heterosexual orientations, more specifically, lesbian/gay identifiers (e.g., "femme" behaviors for men or "mannish" appearance in women). As such, participants may lack the ability to accurately ascertain whether or not they have interacted with bisexuals and as such, are restricted in their ability to accurately complete the Exposure to Bisexuals Scale (EBS).

Moreover, indirect contact questions may not present well as many "bisexual" characters presented by the media are either unlabeled/ambiguous (e.g., a woman has sex with other women for on-screen "titillation," but the focus of the film is on her
heterosexual relationships) or the media focuses on a more stereotypic lesbian/gay portrayal of said bisexual character (e.g., the male has a stereotypically "gay" profession, is feminine and the film focuses on his male-to-male sexual relationships). For a number of participants, as well as the general American public, the idea of "bisexuality" as a sexual orientation may be a new concept as many may have focused on, or assumed, a dichotomized conceptualization of sexuality: either "gay" or "straight."

Another explanation is the role that the bisexual may play in "confusing" heterosexuals (Blumstein & Schwartz, 1977). Students may be interacting with bisexual persons who verbally identify as "gay" due to pressures from the lesbian/gay community, the need for support in the college setting by the lesbian/gay community, or because they simply tire of explaining their specific sexual orientation, thus identifying as lesbian or gay makes it easier for them. Unfortunately, their heterosexual peers do not have the opportunity to learn or develop further cultural awareness and are thus, relegated to a dichotomized understanding of sexuality or rely on the media for descriptions of bisexuality. Moreover, for the sake
of our study, their ability to identify bisex*ual individuals with which to make “contact” or “quality” assessments is severely restricted due to bisexual “invisibility.”

An alternative to self-reported contact would be to use an experimental research design that includes immediate contact with a bisexual, to better assess contact affects. Possible methods may include showing a film of a biography of a bisexual person, having participants directly interact with a person who identifies as bisexual, having participants work together on a “project” with a bisexual, or having a panel that includes a bisexual person. By having immediate contact, participants are not called upon to “remember” contact experiences, which may or may not be ambiguous, given the “invisible” nature of bisexuality.

In addition, follow-up studies should be conducted to assess the long-term effects of contact with bisexual persons on attitude formation. Measuring participants’ attitudes towards bisexuals before participation in the study, after participation, as well as assessment a month or so later, may better indicate the effects of contact on individuals and their long-term attitudes.
Our second hypothesis that participants’ global awareness would have a significant effect in predicting attitudes towards bisexuals was not supported by our data. As no preexisting data exist to base our understanding of the Global Awareness Profile (GAP), in terms of quantitative methods, we look to the instrument itself for reasons for its failure in this particular study.

Further refinement of the instrument in future studies: revising the questions to reflect current events, changing the number of questions, evaluating individuals’ attitudes towards global knowledge, and/or assessing perceived need for global knowledge, may provide more promising statistical results.

In terms of the statistical results themselves, the GAP is a factual measure of global knowledge. Comparing the fact-based GAP to the attitudes-based Attitudes Regarding Bisexuality Scale may have proven to be analogous to the old adage “comparing apples and oranges.” Another factor is the concern that the American school system is failing in its role as educator. In *Cultural Amnesia*, Stephen Bertman (2000) discusses the increasing ignorance that marks each new generation of American students—the “forgetting” of
our nation’s domestic and international history. He suggests that today's Americans are losing a consciousness of history, and with it, a sense of national identity and direction as well as the ability to effectively relate to other nations. As Henry’s (2002) *USA Today* article and Bertman (2000) agree: American high school students are barely scoring at a basic level on history competency tests.

To the researcher, it is unlikely that American students are opting to learn about other nations in lieu of their own country’s history; thus is makes sense for knowledge or global awareness to have little bearing on attitude formation. A possible revision of this study would be to measure *attitudes* towards global knowledge and attitudes toward bisexuality. It is possible that analyses would reflect a more significant relationship between *two* measures of *attitudes*, rather than between more distal variables.

Another possible factor explaining the failure of the GAP and the EBS to predict attitudes towards bisexuals is the age of the general sample pool. As freshman in college, many are either 17 or 18 years old; thus their level of exposure is restricted. Most have only recently left the protective environments of their hometowns,
which, given the sample comes from a Midwestern university, is most likely more conservative than its east or west coast counterparts.

Future research would incorporate a re-sampling of the sample pool in their senior year to assess whether age and college experience may play a part in exposure, as well as global knowledge acquisition. In addition, research should use a sample pool that incorporates students from diverse U.S. regions (e.g., the South, Midwest, West and East Coasts) as different results may be found due to the populations’ experiential differences.

Hypotheses 3 and 4 were supported by our data. Female participants demonstrated more positive attitudes towards bisexuality than their male counterparts, and female bisexuality was viewed more positively than male bisexuality. Our results support the research findings of earlier studies (Eliason, 1997; Herek, 1988; Herek, 1994, Mohr & Rochlen, 1999; Sampson, 2001). As previously mentioned, the American heterosexual community, in general, holds different standards for female versus male homosexuality. Thus, it makes sense that female bisexuality would be viewed more
positively than male bisexuality. In the form of circular logic, where standards feed into attitudes and in turn, these attitudes feed into standards, these different standards for female and male homosexuality/bisexuality fosters an environment where women are at liberty to have more flexible attitudes towards non-heterosexual orientations.

Likewise, because males are negatively viewed for practicing a gay or bisexual lifestyle, heterosexual males have been placed in a position, whether implicitly or explicitly, to display their “masculinity.” Given the historical stereotype of the male homosexual as “effeminate,” this leaves little room for the “manly” heterosexual male to embrace, acknowledge, or accept the gay or bisexual male without some form of “threat” to their own sexual orientation.

Future research should more accurately assess the mechanisms behind gender differences in responses towards non-heterosexual orientations. One way would be to use instruments that assess participants’ perceived gender and social role. In addition, measures that address concepts of “masculinity,” traditionalism, as
well as attitudes towards feminism, may give us a better idea of the 
pre-conceived notions that participants have about gender and 
identity. It is possible that a participant with more conservative, 
traditional gender role/identity attitudes may have more negative 
attitudes about bisexuality. Assessment of attitudes towards gender 
and social norms may also help in understanding the rationale 
behind discrepancies in attitudes towards female versus male 
bisexuality. Research should address the effect and relationship that 
an individual’s culture may have on attitude formation toward non-
heterosexual orientations.
Conclusion

So what exactly can we conclude from this study? We can conclude that assessing attitudes towards bisexuals may be more complex than assessing attitudes towards lesbians/gay males. The role of the bisexual in American society is even more of a "hidden minority" than it is for the lesbian/gay community. Self-identification and identification by others is fraught with difficulties. As such, assessing heterosexual attitudes towards bisexuals, based on contact and/or exposure may not only be affected by the "invisibility" of bisexuals, but the age and gender of the participants.

Despite our study's inability to find confirmatory evidence, global awareness may play a part in attitude formation; however, much more empirical research must be done with pre-existing measures of awareness for us to have a better picture of its significance. Moreover, better instruments for assessing global or cultural awareness must be developed so that we may more accurately test this construct.

Most importantly, this study replicated previous findings indicating the power of the American public in attitudes towards
bisexuals. Not only were female bisexuals rated more favorably than male bisexuals, but female participants were more likely to demonstrated positive attitudes towards bisexuality than their male counterparts. This difference in ratings and participant attitudes indicates a far larger factor affecting attitude formation. General American attitudes, as well as sex role standards, play an important part in attitudes towards bisexuality and homosexuality. To deny the magnitude that social gender roles/interaction roles may play in attitude development would be a serious oversight.
REFERENCES


Appendix A

Demographic Questionnaire
Demographic Questionnaire

Age: _____  Gender: _____  Are you a U.S. citizen? Yes ____ No ____

Academic Major: ______________________________________

Year in school:
_____ Grad  _____ Sophomore
_____ Senior  _____ Freshman
_____ Junior  _____ Other

When you were growing up, what was your parents' marital status?
Never Married_____  Married_____  Separated/Legally Separated_____
Divorced_____  Widow____  Other (please explain) __________

What was your family's income while you were growing up?
$0 - $12,075 $20,476 - $24,675 $33,076 - $37,275 $45,676 - $49,875 $58,276 - $62,475
$12,076 - $16,275 $24,676 - $28,875 $37,275 - $41,475 $49,876 - $54,075 $62,476 - $66,675
$16,276 - $20,475 $28,876 - $33,075 $41,476 - $45,675 $54,076 - $58,275 $58,276 - $62,475
Over $66,675

How many people lived in your household when you were growing up (including yourself)? ____________

How would you describe your hometown? (please check one):
___________Rural  ___________Urban
___________Suburban  ___________Other

Racial/Ethnicity (indicate ALL that apply):
Latino/Hispanic (please indicate specific ethnic group, e.g. "Mexican," "Cuban," etc.): ________________
Asian/Asian-American (please indicate specific ethnic group, e.g. "Korean," "Chinese," etc.): __________
White/European-American
Black/African-American
American Indian/Indigenous/Native American (please indicate specific tribe): ________________________
Other racial/ethnicity that has not been listed: ___________________________________________________

What is your religious or spiritual affiliation/identity? ____________________________________________

What is your sexual orientation? (please check one):
_____Lesbian/Gay/Homosexual: strictly same-sex relationships
_____Homosexual-bisexual: primarily same-sex relationships with occasional heterosexual relationships
_____Bisexual: equally same-sex and opposite-sex relationships
_____Heterosexual-Bisexual: primarily opposite-sex relationships with occasional homosexual relationships
_____Heterosexual: strictly opposite-sex relationships

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Appendix B

Attitudes Regarding Bisexuality Scale (ARBS)
**Attitudes Regarding Bisexuality Scale (ARBS)**

Please read each of the following statements and rate them according to how accurately they describe your attitudes and beliefs. Please respond honestly and answer every question according to the rating scale below.

Strongly Disagree
1
2
3
4
Strongly Agree
5

1. ____ Most men who claim to be bisexual are in denial about their true sexual orientation.

2. ____ The growing acceptance of female bisexuality indicates a decline in American values.

3. ____ Most women who call themselves bisexual are temporarily experimenting with their sexuality.

4. ____ Bisexual men are sick.

5. ____ Male bisexuals are afraid to commit to one lifestyle.

6. ____ Bisexual women have a clear sense of their true sexual orientation.

7. ____ I would not be upset if my sister were bisexual.

8. ____ Lesbians are less confused about their sexuality than bisexual women.

9. ____ Bisexual men should not be allowed to teach children in public schools.

10. ____ Female bisexuality is harmful to society because it breaks down the natural divisions between the sexes.

11. ____ Male bisexuality is not usually a phase, but rather a stable sexual orientation.

12. ____ Male bisexuals have a fear of committed intimate relationships.

13. ____ Bisexuality in men is immoral.

14. ____ The only true sexual orientations for women are homosexuality and heterosexuality.

15. ____ As far as I'm concerned, female bisexuality is unnatural.

16. ____ Just like homosexuality and heterosexuality, bisexuality is a stable sexual orientation for women.

17. ____ Male bisexuality is not a perversion.

18. ____ Most women who identify as bisexual have not yet discovered their true sexual orientation.
To assess overall attitudes towards bisexuality, item numbers 1-5, 8-10, 12-15, and 18 are reverse coded (e.g. “1=5,” “2=4,” “3=3,” etc.), while item numbers 6, 7, 11, 16, 17 were not reverse coded. Once items are reverse coded, item scores are summed together to create an overall ARBS score (range 18-90). Lower scores indicate more negative attitudes towards bisexuality. Higher scores indicate more positive attitudes towards bisexuality.

For assessment of ARBS male and female subscales, participants’ scores were reverse coded, as above, and totaled based on the following items:

Male subscale: item numbers 1, 5, 11, 12, 13, 17

Female subscale: item numbers 2, 8, 10, 14, 15, 18
Appendix C

Global Awareness Profile (GAP)
Global Awareness Profile (GAP)

Instructions: Read each question and circle your answer. This is NOT, in any way, an intelligence test, it is a global awareness inventory. Try to answer every question, even if you have to guess.

1) The world’s most popular sport is
a. Basketball
b. Baseball
c. Football
d. Soccer

2) The world population in 1999 was estimated as
a. 3.7 billion
b. 1.2 billion
c. 5.9 billion
d. 12.1 billion

3) During 1999, in which country were the majority of the world’s ten largest banks to be found?
a. Japan
b. Germany
c. United States
d. Switzerland

4) Which of the following leaders lived first?
a. Jesus Christ
b. Mohammed
c. Confucius
d. Martin Luther

5) Which of the following terms describes a systematic destruction of people based on their cultural ethnic identity?
a. Genocide
b. Ethnic Cleansing
c. Shoah
d. All of the above

6) Glasnost was a term used by Mikhail Gorbachev, then premier of the Soviet Union, to signify
a. Openness and the loosening of government control
b. Economic boom resulting from a new glass industry
c. Exportation of Russian oil reserves
d. Ethnic cleansing in Bosnia

7) The world’s largest city (with over 28 million people in 1999) is
a. Mexico City
b. Tokyo-Yokohama
c. Los Angeles
d. Cairo

8) What international organization monitors human rights abuses around the world?
a. Amnesty International
b. Habitat for Humanity
c. Greenpeace
d. All of the above

9) As of 1999, how many nations were members of the United Nations?
a. 50
b. 185
c. 303
d. 1004

10) World Health Organization, International Labor Organization, and International Board for Reconstruction and Development are agencies of the
a. US Government
b. United Nations
c. International Finance Corporation
d. World Trade Center

11) The emergence of a global lifestyle has been made easy by
a. international trade
b. global travel
c. television and film
d. all of the above

12) Y2K is the term used for
a. the technical identity of the Stealth Bomber
b. a mechanical character in Star Wars
c. fears about the possibility that computers would crash in 2000
d. the Russian space station
13) In which country can the largest tract of rain forest be found?
   a. Colombia
   b. Peru
   c. Brazil
   d. Ecuador

14) By far, the largest and most diverse region of coastal commercial development is located among the twelve countries in this region of Africa:
   a. Southern Africa
   b. North Africa
   c. East Africa
   d. West Africa

15) Which country is the world’s leading producer of chlorofluorocarbons that contribute to the depletion of the ozone layer?
   a. United States
   b. Mexico
   c. Canada
   d. Russia

16) A common farming technique in South America that leads directly to deforestation is
   a. irrigation
   b. cooperative farming
   c. commercial farming
   d. slash and burn

17) The Republic of China (ROC) refers to
   a. Taiwan
   b. China
   c. Hong Kong
   d. Singapore

18) In 1997, which Caribbean island did not possess statehood, yet had representation in the US Congress?
   a. Cuba
   b. Dominican Republic
   c. Haiti
   d. Puerto Rico

19) Which of the following cities is the capital of Canada?
   a. Quebec
   b. Montreal
   c. Ottawa
   d. Toronto

20) The modern boundaries of all African countries closely resemble those that
   a. existed prior to colonization
   b. have existed since colonization ended
   c. are based on linguistic homogeneity
   d. exist along divisions of traditional tribal groups

21) In 1838 a forced march of over fifteen thousand Cherokee Native Americans from the State of Georgia to “Indian Territory” in what is now Oklahoma was called
   a. Wounded knee
   b. Broken Horse
   c. Trail of Tears
   d. None of the above

22) The Tigris-Euphrates River empties into which body of water?
   a. Red Sea
   b. Arabian (Persian) Gulf
   c. Gulf of Oman
   d. Gulf of ’Aqaba

23) Which of the following is part of the United Kingdom?
   a. Denmark
   b. Irish Republic
   c. Scotland
   d. Netherlands

24) Beirut is the capital of which country?
   a. Jordan
   b. Syria
   c. Lebanon
   d. Palestine

25) Most traditional African religions teach that death is
   a. the end of life
   b. the transition to the spirit world
   c. the beginning of life in heaven
   d. the beginning of life as a god
26) Where is the holiest of geographic locations that every practicing Muslim attempts to visit once in his or her life?
   a. Ganges River
   b. Vatican City
   c. Mecca
   d. Istanbul

27) Of the millions of immigrants to North America, which group includes many who did not come voluntarily?
   a. Vietnamese
   b. Jews
   c. Africans
   d. Chinese

28) What are the Chinese astrological symbols?
   a. mythological people
   b. divine beings
   c. animals
   d. spiritual images

29) Neapolitan opera originated in which European city?
   a. London, England
   b. Paris, France
   c. Berlin, Germany
   d. Naples, Italy

30) In mountainous regions of Asia, agriculture has been practiced for millennia by employing this environmentally sustainable method.
   a. rice paddies
   b. flood irrigation
   c. crop rotation
   d. terraced farming

Scoring for the GAP was based on total numbers of answers correct. An incorrect answer receives 0-points while a correct answer receives 1-point. Higher scores indicate more global awareness while lower scores indicate less global awareness. Answer key is as follows:

1. D
2. C
3. A
4. C
5. D
6. A
7. B
8. A
9. B
10. B
11. D
12. C
13. C
14. D
15. A
16. D
17. A
18. D
19. C
20. B
21. C
22. B
23. C
24. C
25. B
26. C
27. C
28. C
29. D
30. D
Appendix D

Exposure to Bisexuals Scale (EBS)
Exposure to Bisexuals Scale (EBS)

Instructions: Please read each statement carefully and indicate how often you have had the interactions and how you would rate your experience. Please circle the answer that best fits.

1. How often have you interacted with bisexuals at work?
   Never  Once or Twice  A couple times a year  Monthly  Daily
   Overall, how would you rate the experience?
   1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

2. How often have you had interactions with bisexuals at family gatherings?
   Never  Once or Twice  A couple times a year  Monthly  Daily
   Overall, how would you rate the experience?
   1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

3. How often have you seen bisexuals on television programs or movies?
   Never  Once or Twice  A couple times a year  Monthly  Daily
   Overall, how would you rate the experience?
   1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

4. How often have you interacted with bisexuals at school?
   Never  Once or Twice  A couple times a year  Monthly  Daily
   Overall, how would you rate the experience?
   1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

5. How often have you heard jokes about bisexuals?
   Never  Once or Twice  A couple times a year  Monthly  Daily
   Overall, how would you rate the experience?
   1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

6. How often have you interacted with bisexuals while shopping?
   Never  Once or Twice  A couple times a year  Monthly  Daily
   Overall, how would you rate the experience?
   1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

7. How often have you had interactions with neighbors or dormmates who are bisexual?
   Never  Once or Twice  A couple times a year  Monthly  Daily
   Overall, how would you rate the experience?
   1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative
8. How often have you interacted with friends who have identified as bisexual?
   - Never
   - Once or Twice
   - A couple times a year
   - Monthly
   - Daily
Overall, how would you rate the experience?
1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

9. How often have you had exposure to bisexuals/bisexuality on the Internet?
   - Never
   - Once or Twice
   - A couple times a year
   - Monthly
   - Daily
Overall, how would you rate the experience?
1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

10. How often have you interacted with bisexuals at temple, church, religious study groups, etc.?
    - Never
    - Once or Twice
    - A couple times a year
    - Monthly
    - Daily
Overall, how would you rate the experience?
1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

11. How often have you read news or entertainment articles about bisexuals?
    - Never
    - Once or Twice
    - A couple times a year
    - Monthly
    - Daily
Overall, how would you rate the experience?
1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

12. How often have you seen bisexuals in advertisements (both traditional media as well as the Internet)?
    - Never
    - Once or Twice
    - A couple times a year
    - Monthly
    - Daily
Overall, how would you rate the experience?
1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

13. How often have you heard negative comments directed towards bisexuals?
    - Never
    - Once or Twice
    - A couple times a year
    - Monthly
    - Daily
Overall, how would you rate the experience?
1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

14. How often have you seen graffiti about bisexuals?
    - Never
    - Once or Twice
    - A couple times a year
    - Monthly
    - Daily
Overall, how would you rate the experience?
1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative

15. How often have you had conversations with someone who is bisexual?
    - Never
    - Once or Twice
    - A couple times a year
    - Monthly
    - Daily
Overall, how would you rate the experience?
1 Very Positive  2 Moderately Positive  3 Neutral  4 Moderately Negative  5 Very Negative
To evaluate the EBS, responses are numerically coded such that 1=“never,” 2=“once or twice,” 3=“a couple times a year,” 4=“monthly,” and 5=“daily.” To evaluate contact, only the first question of each item number (e.g. beginning with “how often...”) is used for analyses. The second question of each item number (e.g. “overall, how would you rate the experience”) assesses the quality rating of said contact. As previously mentioned, we did not opt to use quality ratings for our analyses. “Contact” responses are entered and then summed to provide the total contact EBS score. Higher scores indicate more contact with bisexuals/bisexuality, whereas lower scores indicate less contact with bisexuals/bisexuality.
Appendix E

Balanced Inventory of Desirable Responding (BIDR)
## Balanced Inventory of Desirable Responding (BIDR)

**Instructions:** Using the scale below as a guide, write a number in the blank to the left to indicate how much you agree with each statement.

<table>
<thead>
<tr>
<th>Not True</th>
<th>1</th>
<th>Somewhat True</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Very True</th>
<th>7</th>
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</thead>
<tbody>
<tr>
<td>1. _______ My first impression of people usually turns out to be right.</td>
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<td>2. _______ It would be hard for me to beak any of my bad habits.</td>
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<td>3. _______ I don’t care to know what other people really think of me.</td>
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<td>4. _______ I have not always been honest with myself.</td>
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<td>5. _______ I always know why I like things.</td>
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<td>6. _______ When my emotions are aroused, they bias my thinking.</td>
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<td>7. _______ Once I’ve made up my mind, other people can seldom change my opinion.</td>
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<td>8. _______ I am not a safe driver when I exceed the speed limit.</td>
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<td>9. _______ I am fully in control of my own fate.</td>
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<td>10. _______ It’s hard for me to shut off a disturbing thought.</td>
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<td>11. _______ I never regret my decisions.</td>
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<td>12. _______ I sometimes lose out on things because I can’t make up my mind soon enough.</td>
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<td>13. _______ The reason why I vote is that my vote can make a difference.</td>
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<td>14. _______ My parents were not always fair when they punished me.</td>
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<td>15. _______ I am a completely rational person.</td>
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<td>16. _______ I rarely appreciate criticism.</td>
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<td>17. _______ I am very confident of my judgments.</td>
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<td>18. _______ I have sometimes doubted my abilities as a lover.</td>
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<td>19. _______ It is all right with me if some people happen to dislike me.</td>
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<td>20. _______ I don’t always know the reasons why I do the things I do.</td>
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<td>21. _______ I sometimes tell lies if I have to.</td>
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<td>22. _______ I never cover up my mistakes.</td>
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<td>23. _______ There have been occasions when I have taken advantage of someone.</td>
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<td>24. _______ I never swear.</td>
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<td>25. _______ I sometimes try to get even rather than to forgive and forget.</td>
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<td>26. _______ I always obey laws, even if I am unlikely to get caught.</td>
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<td>27. _______ I have said something bad about a friend behind his or her back.</td>
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<td>28. _______ When I hear people talking privately, I avoid listening.</td>
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<td>29. _______ I have received too much change from a salesperson without telling him or her.</td>
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<td>30. _______ I always declare everything at customs.</td>
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<td>31. _______ When I was young, I sometimes stole things.</td>
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<td>32. _______ I have never dropped litter on the street.</td>
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<td>33. _______ I sometimes drive faster than the speed limit.</td>
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<td>34. _______ I have never read sexy books or magazines.</td>
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<td>35. _______ I have done things that I don’t tell other people about.</td>
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<td>36. _______ I never take things that don’t belong to me.</td>
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<td>37. _______ I never take sick-leave from work or school even though I wasn’t really sick.</td>
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<td>38. _______ I have never damaged a library book or store merchandise without reporting it.</td>
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<td>39. _______ I have some pretty awful habits.</td>
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<td>40. _______ I don’t gossip about other people’s business.</td>
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To assess participants' scores on the BIDR, item numbers 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 21, 23, 25, 27, 29, 31, 33, 35, 37, and 39 are reverse scored. After reverse coding the items, one point is added for each extreme response (6 or 7). The final score is based on the sum of the items. Participants' scores can range from 0 to 40. Participants with scores two standard deviations above the mean for the sample group are identified as "extreme responders" and are to be removed from the sample pool.
Appendix F

Debriefing and Counseling Resource Sheet
Debriefing and Counseling Resource Sheet

Thank you for participating in this experiment! The purpose of this study is to explore how an individual’s exposure to bisexuals and their level of global awareness affect the formation of attitudes towards bisexuals and bisexuality. Research has shown that repeated exposure to persons of differing sexual orientations leads towards more positive attitude formation of those sexual orientations. In addition, it is believed that global awareness increases one’s openness to understanding different cultures and lifestyles as well as increasing communicative competency with persons who are different from us.

It is our hypothesis that persons having higher numbers of exposure or direct contact with bisexuals and who have more world knowledge are likely to have more positive attitudes towards bisexuals and bisexuality. Your responses will be used to assess whether global awareness and direct exposure are factors in the development of attitudes towards bisexuals and bisexuality. By increasing understanding of the different factors that affect attitude formation, we hope to assist educational programs that will benefit both the student body as well as formal counselor training. If you have questions or concerns regarding this study, feel free to contact one or all of the following:

Stacy Nicole Fambro
snfambro@yahoo.com
614-299-5869

Dr. Pamela Highlen
highlen.1@osu.edu
614-292-5308

Office of Research Protection
614-688-4792

If in the course of the study, you have developed concerns or uncertainties about your psychological well being or your self esteem as a result of the survey content, you may wish to seek counseling. The Psychological Services Center (Townshend Hall, Rm 141; 292-2059), a training facility for doctoral psychology students, offers some counseling services. In addition, you can make an appointment at the Ohio State University Counseling and Consultation Services (Younkin Success Center, 4th floor; 292-5766). If needed, this service is also available for emergencies.

Again, thank you for participating in this research!