A COMPARISON AMONG HEALTHCARE STUDENTS AT THE UNIVERSITY OF PITTSBURGH IN ATTITUDES ABOUT LESBIANS AND GAY MEN AND SUPPORT FOR LESBIAN AND GAY HUMAN RIGHTS

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The Department of Health and Human Services report, Healthy People 2010 (HP2010), recommends elimination of healthcare disparities for reasons such as sexual orientation, gender, racial or ethnic background, education level, income, disability status, and geographic location. The 2000 Federal Census revealed that same-sex couples live in 99.3 percent of all counties in the United States. Sexual minorities, throughout their lifetime, access our healthcare system and interact with healthcare professionals. Lesbians and gay men experience substantial disparities in health outcomes. Lesbian and gay human rights issues are intricately linked to social, cultural, and political issues in society.

HP2010 notes that health professionals’ attitudes about sexual orientation may contribute to existing healthcare disparities. Access to unbiased healthcare could be a factor in these disparities, yet little is known about the attitudes of healthcare trainees, who will eventually provide the care for sexual minorities and others.

This study explores attitudes towards lesbians and gay men and support for lesbian and gay human rights among first year health care students in the Master of Social Work, School of Medicine, Master of Nursing programs, and School of Dental Medicine at the University of Pittsburgh. This study examines four predictors of attitudes, including academic preparation, personal experiences, political orientation, and frequency of spiritual practice.

Social work students scored higher than other healthcare students in academic preparation, personal experience with non-heterosexual orientation, support for lesbian and gay human rights, and diversity training. First year medical and social work students had more positive attitudes than nursing and dental students toward lesbians and gay men.

Simultaneous multiple regression analysis revealed political identification, personal experience, and frequent spiritual practices were the strongest predictor variables of personal attitudes toward lesbians and gay men and support for lesbian and gay human rights. When the academic preparation scale score was replaced in the regression analysis with the sexual orientation academic preparation item from that scale, it was a significant predictor of personal attitudes toward lesbians and gay men and support for lesbian and gay human rights.
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If we knew what we were doing, it wouldn't be called Research.

- Albert Einstein

In February of my senior year in high school, a biology teacher pulled me aside and showed me a flyer about a college scholarship award. No one in my family had ever considered college. I glanced at the flyer and when I said I had no transportation to Pittsburgh, she offered to drive me. So I looked again, and when I said I couldn't afford the $15 application fee, she offered to pay the fee. We drove to Pittsburgh that weekend and she waited three hours while I took the biology placement test at Chatham College. I often wonder how different my life path would have been if not for $15 and one amazing, patient teacher who believed in me. Although her time on the planet was cut short by cancer, this work is dedicated to Barbara Sterling.

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1.0 INTRODUCTION

1.1 NATIONAL HEALTHCARE DISPARITIES: POOR HEALTH OUTCOMES FOR LBGT

Although federal health data on lesbian, gay, bisexual, and transgender (LGBT) populations has been severely limited, a number of key health issues have been identified as areas that disproportionately affect the LGBT community. Studies have found that LGBT individuals are more likely to be uninsured or under-insured than the general population (Bradford & Ryan, 1988; Diamont, Wold, Spritzer, & Gelberg, 2000; Stall, 2000); they have higher rates of smoking (Garofalo, Wolf, Kessel, Palfrey, & DuRant, 1998; Mays et al., 2002; DHHS, 2000a), alcohol and substance abuse (Bradford & Ryan, 1987; Fifield, Lathan, & Phillips, 1977; Lohrenz, Connelly, Coyne, & Spare, 1978; Mays et al., 2002; McKirnan & Peterson, 1989; Skinner, 1994; DHHS, 2000a), social isolation, depression and stress-related conditions (Dean et al., 2000; DHHS, 2000a), mental health disorders and suicide (CDC, 2008; DHHS, 2000a). Members of the LGBT community are targets of violence (Dean, et al., 2000; GLMA, 2001) and hate crimes (Franklin, 2000; Whitley, 2001; FBI, 2008) at higher rates than the overall population.

LGBT youth have been found to be at greater risk for psychosocial problems including social isolation, drug addiction, sexual risk-taking behaviors, mental illness, and suicide than their heterosexual peers (Blake et al., 2001; Goodenow et al., 2002; Russell et al., 2002; Russell
LBGT youth are also frequently the objects of bullying and harassment by their peers (Thurlow, 2001; Wilson, Griffin, & Ouellett, 2003).

Among the difficulties in research with sexual minorities is that, as with other stigmatized groups, it is difficult to generalize the findings of small convenience samples (Herek, 1998; Millham et al., 1976; Quinn, et al., 2003; Weis & Dain, 1979). Healthcare information specific to sexual minorities is sorely lacking, especially from large random national studies. Most empirical research to date has been limited to exploring issues of male homosexuality, such as the increased risk of HIV/AIDS and other sexually-transmitted diseases (Bauer & Welles, 2001; Semple, Patterson, & Grant, 2003; Kwakwa & Ghobrial, 2003; Rich, Buck, Tuomala, & Kazanjian, 1993; US Department of Health, Education, & Welfare, 1979; DHHS, 1980; DHHS, 2000a).

Gentry (1987) acknowledges cultural assumptions about lesbians and health concerns of lesbians were assumed to be similar to issues faced by gay men. Funded research projects that focus on the experiences and needs of lesbians such as the Epidemiologic Study of Health Risk in Lesbians (ESTHER) project are rare (Aaron et al., 2004). A few studies, however, have shown that lesbian women are less likely to receive routine gynecological care (Mays et al., 2002; Ryan & Bogard, 1994) are more likely to be overweight and obese (Mays et al., 2002; DHHS, 2000a) and have higher rates of breast cancer (DOHMH, 2002) than heterosexual women.

The United States Department of Health and Human Services report, Healthy People 2010 (HP2010), recommends elimination of healthcare disparities based on sexual orientation and other important demographic factors such as gender, racial or ethnic background, education level, income, disability status, and geographic location. This study will summarize key health
disparities that are known for LBGT individuals and review findings and recommendations available in the federal health data as reported by the Healthy People studies.
1.2 IMPORTANCE OF THE PROBLEM: SEXUAL MINORITIES NEED TO ACCESS THE HEALTHCARE SYSTEM

Throughout their lifespan, sexual minorities need to access the healthcare system and interact with healthcare professionals. The 2000 United States Census revealed that same-sex couples live in 99.3% of counties in the nation (U.S. Census, 2000, p. 2); thus, data showed that at any given time and in any given location in the United States, LBGT individuals may require the services of healthcare professionals.

The Healthy People 2010 (HP2010) Companion Document for Lesbian, Gay, Bisexual, and Transgender Health (GLMA, 2000), emphasized the need for respectful and nonjudgmental communication between healthcare providers and their LBGT clients. Complicating this issue is an individual's willingness to "come out" or disclose their sexual orientation to their healthcare providers. Willingness to reveal non-heterosexual orientation has been shown to vary by age cohort. For example, Meckler et al. (2006) found that youth were most likely to discuss sexual orientation and sexual health if they had been directly questioned by their healthcare providers about their sexual orientation. Many older LBGT individuals, having endured discrimination in the past, fear repercussions of disclosure of their sexual orientation, especially if they rely on nursing homes or senior centers (Price, 2005). Shippy, Cantor, and Brennan (2001) found a majority of lesbian and gay elders do not reveal their sexual orientation to their healthcare providers.

Several studies have reported that sexual minorities vary widely in their ability and willingness to engage in honest communication with healthcare professionals, and individuals were most likely not to disclose their sexual orientation if they had encountered negative
attitudes from healthcare professionals in the past (Saulnier, 2002; Caldwell, 1991; Klitzman & Greenberg, 2002; Greene & Herek, 1994).

This study will examine predictors of positive attitudes towards LBGT individuals in health care trainees. Positive attitudes might encourage disclosure, and conversely, negative attitudes might inhibit disclosure of sexual orientation to healthcare providers which hamper LBGT individuals’ full access to the healthcare system.

Educational institutions have the potential to increase awareness, improve understanding of the impact of discrimination, and foster acceptance of lesbian, gay, bisexual, and transgender individuals. Several studies have found that education is an effective means to encourage both students and instructors to recognize and address institutionalized homophobia (Walters & Hayes, 1998; Kurdek, 1988; Serdahely & Ziemba, 1984). Wells (1989, 2001) argues that what is lacking in nursing and other healthcare professions is academic content that addresses etiology, incidence, and diversity of behaviors, and expression, as well as information about institutional, social, and legal consequences of discrimination based on sexual orientation. The attitude of the instructor was found to be of critical importance to increase awareness, foster understanding, and model professional expectations within the classroom setting (Wells, 1989) when presenting information about sexual orientation.

Each of the healthcare professions considered for this study are guided by an accrediting body that establishes and reviews criteria for standards of practice. Accreditation recognizes educational institutions or programs as being in compliance with established professional standards and educational criteria. Accreditation standards can guide necessary curriculum changes, allocation of resources, or improvements to specific programs. Academic preparation,
content, accreditation standards for each of the healthcare professions, and professional expectations for codes of conduct will be summarized within this study.

Since this study is limited to healthcare students being trained at the University of Pittsburgh, a brief overview of the local lesbian, gay, bisexual, and transgender community’s resources and results from a 2003 needs assessment for the sexual minority community of Pittsburgh will be summarized.

1.3 ATTITUDES OF HEALTHCARE PROVIDERS CAN CONTRIBUTE TO HEALTH DISPARITIES IN SEXUAL MINORITIES

Attitudes are defined as personal opinions or "overall evaluations of people, groups, and objects in our social world. Attitudes are important because they affect both the way we perceive the world and how we behave" (Haddock, & Maio, 2007, p. 67). HP2010 notes that health professionals’ attitudes about sexual orientation may contribute to existing healthcare disparities. Sexual minorities risk encountering negative attitudes about their sexual orientation with every interaction with a healthcare provider.

Homosexuality did not conform to majority views on what constituted appropriate sexual behavior by the general population (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953; Schneider & Lewis, 1984). Herek (1990) contends that negative attitudes regarding homosexuality were subsequently institutionalized within the court system, religious doctrines, and social institutions throughout our country.
Previous studies have found that American attitudes about gay men are much more negative than attitudes about lesbians (Herek, 1988; Kite, 1984, 1994). Positive attitudes about gay, lesbian, and bisexual people have been linked to several variables including gender (being female), having more liberal attitudes about sex roles, lower reports of religious attendance and religious beliefs, attending colleges that do not have Greek (fraternity or sorority) social organizations, and having had positive personal contacts with sexual minorities (Hinrichs & Rosenberg, 2002).

Research across the healthcare professions continues to report negative attitudes toward lesbians and gay men in studies with social work students (Cramer, Oles, & Black, 1997; Krieglestein, 2002; Lim & Johnson, 2001; Mackelprang, Ray, & Hernandez-Peck, 1996), medical students (Kelly, St. Lawrence, Smith, Hood, & Cook, 1987; McGrory, McDowell, & Muskin, 1990), and nursing students (Anderson, 1981; Cole, 1996; McKelvey, Webb, Baldassar, Robinson, & Riley, 1999; Rondahl, Innala, & Carlsson, 2003). Published research about dental students regarding sexual orientation has been limited to reporting attitudes regarding those infected with HIV (Erasmus, Luiters, & Brijlal, 2005; Hartshorne, Castens, Engelbrecht, & Hattingh, 1994; Oliveira, Narendran, & Falcao, 2002; Synder, 1993).

1.4 SOCIAL CONTACT WITH SEXUAL MINORITIES MAY IMPROVE ATTITUDES OF HEALTHCARE PROVIDERS

Social contact theory posits that increased social contact is the key to decrease conflict and foster "mutual understanding and regard" (Lett, 1945, p. 35). Contact theory has proven useful in examining the processes individuals use when conflict arises from integrating different
social groups, justifying or judging social behaviors, and defining social issues. Allport's theories about social relationships and the nature of prejudice provide insight regarding characteristics and disparities between social groups in areas such as social status, social stigma, and access to social resources. Examples of social resources include employment, healthcare benefits, and equality in legal proceedings. These issues have particular relevance when we consider sexual orientation since, unlike in matters of race, social differences might not be readily apparent (Haddock, Zanna, & Esses, 1993). This phenomenon was termed by Herek and Capitano (1996) as "concealable stigma" (p. 413). They noted that homosexuals who successfully conceal their sexual orientation avoid being identified with a stigmatized social group. Unless individuals reveal their sexual orientation, they might be assumed to have heterosexual status. Sexual minorities are most likely to disclose sexual orientation when a "majority member group has already formed positive feelings toward the stigmatized person" (Herek & Capitano, 1996, p. 412). Other studies found that respondents who report increased social contact with a gay person tend to also report more favorable attitudes toward gay people (Gentry, 1987; Herek, 1988; Herek & Glunt, 1993; Schneider & Lewis, 1984). The desire to avoid social stigma, negative judgment, or overt discrimination, in order to “pass” as accepted members of a dominant or majority group (Allport, 1954/1979) can be the root cause of efforts to conceal non-heterosexual orientation. Overby and Barth (2002) found that as individual gays and lesbians came out in their home communities, attitudes toward sexual minorities improved overall for their community.
1.5 RELIGIOUS AFFILIATION, FREQUENCY OF SPIRITUAL PRACTICE, AND POLITICAL IDENTIFICATION OF HEALTHCARE PROVIDERS

Some studies have reported correlations between expressed religious prejudices and negative attitudes toward homosexuals (Laythe, Finkel, & Kirkpatrick, 2001; Laythe, Finkel, Bringle, et al., 2002). Moral disagreements over sexual orientation can be closely tied to religious beliefs. Efforts to increase awareness about non-heterosexual orientation can be seen as a threat not only to individual beliefs but to the moral integrity of entire communities (Button, Rienzo, & Wald, 1997). As the United States has become increasingly multicultural, political rhetoric between political parties has become more polarized. Views on social or cultural issues often serve to differentiate between political parties. Opinions held by individuals have been found to be influenced by the rhetoric of their political party affiliation (Schlesinger, 1985). Lindaman & Haider-Markel (2002) examined data from 1970 to 1999 for indications of support for gay civil rights in the United States. They found political party leadership had become increasingly partisan and polarized on gay issues over the past 30 years while the general public indicated a significantly less partisan "escalating trend in pro-gay support" (p. p.99).

This dissertation will summarize what is known about attitudes toward sexual orientation and examine healthcare student attitudes. It will also review research supporting social contact theory and personal experience, religion and frequency of spiritual practice, and political identification for their relationship to attitudes toward sexual orientation.

1.6 UNDERSTANDING THE EXTENT OF NEGATIVE ATTITUDES IN HEALTHCARE STUDENTS TOWARD LBGT AND SUPPORT FOR LESBIAN AND
GAY HUMAN RIGHTS MAY HELP TO REDUCE FUTURE HEALTHCARE DISPARITIES

LBGT individuals can encounter negative attitudes, social stigma, and heterosexist assumptions when seeking healthcare services. Although there has been a steady increase in self-reported acceptance of homosexuality over the past two decades, homosexuality is still deeply stigmatized in the United States (National Gay and Lesbian Task Force Foundation [NGLTF], 2008). LGBT individuals often rely on informal communication from other community members for referrals to friendly or sensitive healthcare providers. Personal experiences, previous social contact and interactions with sexual minorities have been shown to affect an individual's attitude toward homosexuality (Gentry, 1987; Herek, 1988; Herek & Glunt, 1993; Schneider & Lewis, 1984). An initial step toward improving the quality of healthcare for LBGT individuals is to determine the extent of negative attitudes in healthcare providers.

Little information is known about what variables may predict support for human rights issues for LBGT individuals. Millman (1993) concluded sexual minorities encounter multiple layers of potential discrimination, as well as personal, financial, institutional, and cultural barriers as they attempt to obtain competent, sensitive healthcare. The medical establishment and the American Psychological Association served historically to legitimize social discrimination against lesbians and gays. This section will review the impact of historical persecution of sexual minorities based on pathology and sodomy laws which helped form the social context. This social context, when reinforced by legal discrimination, was identified by the United States Department of Health and Human Services (2000b) as placing "a significant burden on mental health and personal safety" for most sexual minorities seeking medical care.
Social workers, physicians, nurses, and dentists all have professional mandates that call for a level of competent practice with every individual, regardless of sexual orientation. We cannot expect healthcare professionals to provide quality of care for LGBT individuals if they are not properly prepared and educated about such issues during their academic years. A recent review of the professional literature of dentistry, dental hygiene, medicine, and nursing found the health professions lacking in effective methods to evaluate student knowledge of cultural competency with diverse clientele and ill-equipped to monitor student compliance with published standards for professional practice during their clinical experiences (Gregorczyk & Bailit, 2008).

The Universal Declaration of Human Rights clarified political, economic, and social rights with the intention that they apply to all people. Rights to life and liberty, to live free from violence, to be treated as equal under the law, rights to privacy, freedom to travel, peaceably assemble, to fair and public trials are examples of political rights (Samar, 2001). Individual social contact with gays and lesbians was found to be a significant predictor of whether individuals were more likely to favor nondiscrimination policies and laws protecting sexual minorities (Lewis, 2006). Due to lack of federal recognition of their partnerships, sexual minorities continue to be denied the protections offered by such things as Social Security survivor benefits, pension benefits, and the Family and Medical Leave Act that are available to married heterosexual couples. Several studies (Altenmeyer, 2001; Klamen, Grossman, & Kopacz, 1999; and Liddle, 1999) have suggested that attitudes about non-heterosexual orientation and support for lesbian and gay human rights issues may affect the care that LGBT individuals receive from future healthcare professionals. This study will review some significant
changes in social and political issues that impact what human rights are extended to LBGT individuals in the United States.

1.7 OVERVIEW OF THE METHODS

This study examined attitudes toward lesbians and gays and support for lesbian and gay human rights in a convenience sample of first year social work, medical, nursing, and dental students. Data was collected through four healthcare professional programs at the University of Pittsburgh. Healthcare students were approached in classroom settings and voluntarily completed surveys. This study explored differences between the healthcare student reported academic preparation for sexual orientation, academic preparation score, diversity training, personal experiences with non-heterosexual orientation, frequency of spiritual practice, political affiliation, attitudes toward lesbians and gay men, and support for lesbian and gay human rights. This study also identified predictors of the two primary variables: attitudes toward lesbians and gay men, and support for lesbian and gay human rights.

1.8 SURVEY INSTRUMENT

The survey instrument used for this study was comprised of five sections. The survey consisted of 77 content questions and a short demographic section. The first section assessed how well the healthcare students report their academic experiences have prepared them to address diversity issues. This scale was an investigator-created self-reported scale of academic preparation based
upon the author's experience over the past five years in teaching diversity classes. The second section assessed the healthcare students self report of exposure to or social contact with people who were not heterosexual. This scale was an adaption of an unpublished doctoral study scale measuring personal experience with individuals who were mentally ill, with questions altered to reflect self-report of personal experience with sexual orientation. The third section assessed the healthcare students self report of their attitudes toward lesbians and gay men. The scale used was Herek's (1984) standardized personal attitudes toward lesbians and gay men scale. The fourth section assessed the healthcare students self report of their support for lesbian and gay human rights. The scale used was a rescaled version of Ellis' (2002) standardized scale measuring support for lesbian and gay human rights. The fifth section assessed demographic information such as age, ethnicity, gender, income, and education. This section also included frequency of spiritual activity, extent of diversity training, and political affiliation.

1.9 ANALYSIS OF THE DATA

Frequencies were obtained for all demographic measures for all respondents involved in the study. The four student groups were then described on the basis of age, ethnicity, religious affiliation, frequency of spiritual activities, year of study within their academic program, whether they had taken a college-level diversity course, whether any of their college courses had mentioned diversity issues, whether they participated in diversity workshops or training programs, number of years of healthcare experience, total household income, political identification, gender, sexual orientation, and relationship status.
The first goal of the study was to describe and document baseline levels across the healthcare schools on the following measures (a) academic preparation, (b) diversity training, (c) personal experiences with non-heterosexual orientation, (d) attitudes toward lesbians and gay men, and (e) support for lesbian and gay human rights. Separate one-way analysis of variance (ANOVA) procedures were conducted to address that goal.

The second goal of the study was to explore predictors of attitudes between the student groups. As the most conservative approach, respondents who had missing data were initially excluded from a stepwise regression. Stepwise multiple regression analysis was used to determine what predictor variables contribute student groups in attitudes towards lesbians and gay men and support for lesbian and gay human rights. There is some concern that stepwise regressions can "overfit the data because they take advantage of chance relationships in the sample" (Newton & Rudestam, 1999, p. 254). As there are theoretical reasons for including the variables used within the analyses to determine significant predictors, a simultaneous regression was determined to be a more appropriate approach to verify that the predictor pattern remains consistent. Subsequent simultaneous regressions using estimated missing items for only the first year respondents yielded similar patterns as those from earlier stepwise regression findings for the entire sample. This study will report only results of analysis of first year respondent data.

1.10 HOW FINDINGS ADDRESS THE MAIN STUDY QUESTIONS

Study findings indicate that social work students scored higher than other healthcare students in academic preparation, personal experience with non-heterosexual orientation, support for lesbian and gay human rights, and diversity training. First year medical students scored higher than all
other healthcare students in positive attitudes toward lesbians and gay men. Both stepwise and simultaneous multiple regression analysis revealed that political identification and personal experience were the two strongest predictor variables for personal attitudes toward lesbians and gay men (ATLG) and for support for lesbian and gay human rights (SLGHR7). One result of this study is confirmation that, even when used with a different subject population and a larger sample size (N=369) than the study conducted by Ellis, Kitzinger, & Wilkinson (2002), there is not a significant difference between the attitudes towards lesbians and gay men and the support for lesbian and gay human rights measures.

1.11 AUTHOR CONTEXT FOR THE STUDY

During my enrollment in the doctoral program, I have been employed as an adjunct instructor at several local universities, teaching frequently in both social work and nursing programs. I have always been interested in the differences within the healthcare fields and health professions. My clinical career includes a background in hospital social work as Director of the Social Services Department for Atlantic City Medical Center. My hospital experience informed an earlier multivariate pilot project conducted with another doctoral student (Carrick and Dolano, 2003) investigating the role that academic preparation and personal experience play in influencing different attitudes toward sexual minorities and human rights between students enrolled in a program to become registered nurses (RN) and bachelor-level social work (BSW) students.
2.0 STUDY DESCRIPTION

The study presented herein helps establish a baseline of the attitudes about gays and lesbians and support for lesbian and gay human rights among a convenience sample of first year students in the Master of Social Work, School of Medicine, Master of Nursing programs, and School of Dental Medicine at the University of Pittsburgh. It also considers what variables that might influence attitudes about gays and lesbians and support for lesbian and gay human rights. Some of the variables considered include type of student, level of personal experience with non-heterosexual orientation, academic preparation, frequency of spiritual activities, diversity training, political identification, and demographic data between the groups.

There are significant differences among the healthcare student populations sampled for this study which negates direct comparison. Each student group surveyed in this study operates under different professional mandates, and curriculum requirements. Each respondent entering their respective program also has unique contributions and personal experiences that can influence their own understanding of healthcare. However, this exploratory study is an important step toward establishing a baseline of attitudes toward lesbians and gay men and support for lesbian and gay human rights between different student groups preparing for future professional healthcare practice.

The study subject population was limited to only first year students from each professional healthcare program at the University of Pittsburgh. The survey instrument used for this study was
comprised of five sections: (a) a self-reported scale of academic preparation, (b) a self-reported scale of personal experience with non-heterosexual orientation; (c) a standardized scale of attitudes toward lesbians and gay men; (d) an adaptation of a standardized scale measuring support for lesbian and gay human rights; (e) diversity training, and; (f) demographic information.

2.1 HYPOTHESES FORMATION AND PRIMARY GOALS OF THE STUDY

Given the variation in professional training and curriculum requirements in each professional program it is expected that social work, medical, nursing and dental students will differ significantly in reports of their academic preparation and diversity training. What is not known is if healthcare students as a group will report significant differences in their personal experiences with sexual minorities, attitudes about gays and lesbians, or in support for lesbian and gay human rights.

Some variables have been shown to positively or negatively affect attitudes about sexual minorities. Education has been shown to positively affect attitudes about sexual minorities. It is expected that healthcare students who report more academic preparation and diversity training will have more positive attitudes toward lesbians and gays. Increased social contact can positively impact attitudes about sexual minorities. It is expected that healthcare students reporting more personal experiences with non-heterosexual orientation will have more positive attitudes toward lesbians and gays. Frequent spiritual activity is another variable that has been shown to negatively affect attitudes about sexual minorities. It is expected that healthcare students reporting more frequent spiritual activity will have less favorable attitudes toward
lesbians and gays. Conservative political identification has also been reported to negatively affect attitudes about sexual minorities. It is expected that healthcare students who report a more conservative political identification will have less positive attitudes toward lesbians and gays.

Less is known about what variables are significant for support for lesbian and gay human rights. But it is reasonable to expect that healthcare students reporting more academic preparation and diversity training will also report more positive support for lesbian and gay human rights. Increased social contact has been shown to positively impact support for lesbian and gay human rights. It is expected that healthcare students who report more personal experience with non-heterosexual orientation will also show higher levels of support for lesbian and gay human rights. It is unknown what effect frequent spiritual activity has upon support for lesbian and gay human rights. Given frequent spiritual activity has been shown to negatively affect attitudes about sexual minorities it is reasonable to expect that healthcare students who report more frequent spiritual activity may also report less support for lesbian and gay human rights. Likewise, since conservative political identification has been shown to negatively affect attitudes about sexual minorities it is reasonable to expect that healthcare students who report a conservative political identification will also report less support for lesbian and gay human rights. Gender has been shown to be a strong predictor of negative attitudes towards lesbians and gays. It is expected that male healthcare students will have less favorable attitudes toward lesbians and gays when compared to female healthcare students. It is reasonable to expect that male healthcare students may also have lower levels of support for lesbian and gay human rights compared to female healthcare students.

There are three main goals of the study. The first goal (depicted in Model 1) is to describe and test differences between social work, medical, nursing and dental student groups using a one
way analysis of variance to determine whether they differ significantly across four main dependent variables: (a) their academic preparation, (b) their personal experiences with non-heterosexual orientation, (c) their attitudes toward lesbians and gay men, and (d) their support for lesbian and gay human rights.

![ANOVA Diagram]

**Figure 1. ANOVA**

The second goal of this study is to try to explain what may account for differences in the attitudes toward lesbians and gay men. Multiple regression analysis will reveal which if any predictor variables contribute to variation in attitudes toward lesbians and gay men (as depicted in Figure 2).
The third goal of this study is to try to explain what may account for differences in support for lesbian and gay human rights (as depicted in Figure 3). The study will also describe and compare demographic variables between student groups.

Figure 2. Conceptual Model: Multiple Regression Analysis Attitudes toward Lesbians and Gays
The following chapter provides a review of the current professional literature including (a) definitions and relevant LBGT terminology; (b) a review of national healthcare disparities and previous research on healthcare and sexual minorities; (c) a summary of Pittsburgh’s local LGBT community; (d) academic preparation and academic content within each healthcare student group; (e) accreditation standards for the healthcare professions and professional codes.
of ethical practice; (f) attitudes about sexual orientation by each healthcare student group; (g) contact theory, personal experience, and attitudes about sexual orientation; (h) religion, frequency of spiritual practice, and attitudes about sexual orientation; (i) political identification and attitudes about sexual orientation; (j) a summary of persecution, prosecution, and pathologizing of sexual minorities in the United States; (k) human rights issues within historical social and political context; (l) and support for lesbian and gay human rights.

LBGT individuals are challenged when confronted by negative attitudes, social stigma, and heterosexist assumptions when seeking healthcare services. LBGT individuals often rely on informal communication from other community members for referrals to friendly or sensitive healthcare providers. One way to improve the quality of healthcare for LBGT individuals is to better understand the extent of negative attitudes in health care providers in order to help reduce barriers to healthcare access. This exploratory study is an important step toward that goal as it seeks to learn more about University of Pittsburgh healthcare student's attitudes about gays and lesbians and their support for lesbian and gay human rights issues.
3.0 LITERATURE REVIEW

3.1 RELEVANT LBGT TERMINOLOGY

Heterosexual relationships have historically been accepted and afforded legal protections in ways that differed greatly from homosexual relationships. The term "heterosexist" describes an "ideological system that denies, denigrates, and stigmatizes any non-heterosexual form of behavior, identity, relationship, or community" (Dean, et al., 2000, p. 102). Heterosexism has been our accepted cultural default, implying that heterosexuality is superior to any other form of sexual expression (Ferris, 2006, p. 5). Individuals can reflect heterosexist bias when requesting information about one’s marital status or spouse with a word choice reflective of assumptions of heterosexual pairing (for example, inquiring after one’s wife or husband) rather than using a more neutral term, such as “partner” or “significant other.” Likewise, social institutions can reflect heterosexist bias by, for example, offering healthcare coverage only to legally recognized family members, which effectively means that homosexual employees are denied healthcare coverage for their family members since unable to obtain legal recognition of their relationship status in the United States.

Heterosexism differs from homophobia. The term homophobia was coined in 1967 to express an irrational negative attitude toward gays and lesbians (Weinberg, 1972). It was further expanded by Finnegan & McNally (2002, p.225) to mean both the "irrational fear of and hatred;
and contempt for homosexuals and homosexuality and indeed any sexual orientation that varies from heterosexuality." Herek (1984a) found that homophobic attitudes were more likely to be associated with acceptance of traditional gender roles, and greater involvement in religious fundamentalism (1984b). Herek's findings have consistently shown that students’ negative attitudes were strongly correlated to traditional gender and sex role attitudes, having few or no gay or lesbian friends, and a lack of personal interactions with gay men or lesbians (Herek, 1984b, 1988, 1994, 1998; Herek, & Capitanio, 1996; Herek, & Glunt, 1993). Matchinsky & Iverson (1996) found homophobic attitudes were related to the belief that psychological disturbance in development caused homosexuality. Homophobia is only one factor when considering negative attitudes toward sexual minorities. An individual can be heterosexist without being homophobic, meaning that a person can have an understanding of the world with assumptions based on heterosexual relationships without necessarily having hatred, contempt, or fear about lesbian and gay relationships. More recent research examining negative attitudes toward sexual minorities (e.g., Zea, Reisen, & Diaz, 2003) acknowledge the impact that traditional views of marriage, family, gender roles, and child rearing have in reinforcing social relationship assumptions about lesbians and gay men. This social context can occur with or without homophobic intent.

Sexual minorities can include individuals who identify as lesbian, bisexual or bi-attractional, gay, transgender, and queer (LBGT). Throughout this work, the terms "sexual minority" or "LBGT" are intended as inclusive terms, to account for any sexual orientation other than heterosexual. Both terms are used reluctantly, given the author's concern that the terms themselves continue to marginalize lesbian, gay, bisexual, transgender, and queer individuals' life experiences, and is not meant to imply a labeling of sexual expression as abnormal or
homogeneous. The term "sexual minority" is used throughout this text because it is the term most familiar to the general public; however, it is done so with the caveat that identity politics is closely linked to word choice.

The difficulties in identifying as a lesbian, gay, bisexual, or transgender person are complicated by social subdivisions of race, religion, socioeconomics, physical or mental ability, and other socially-constructed categories. Martinez (2003) cautions that superficial efforts to publish and highlight individual aspects about sexual orientation often fail to recognize or take into account the cumulative effects of living within multiple layers of oppression.

The concept of heteronormativity was first defined by Warner (1993), who recognized that any form of sexual expression other than heterosexual orientation is often marginalized, ridiculed, or persecuted by social policies or cultural practices. From Disney movies extolling the princess rescued by the prince to advertisements for luxury vacations for couples at Sandals resorts, children learn the social expectations of heteronormativity (Warner, 1993) and the romantic rules of heterosexuality in our culture.

A more inclusive term, "sexual diversity," as used by Diana Kardia (1996) to capture the myriad of experiences aside from heterosexual expression, has yet to enter the common lexicon. Throughout the text, the terms "homosexual" and "gay" are used interchangeably to denote specific issues or research with gay males; the term "lesbian" is used if the research or issue is exclusive to women who partner with women.
3.2 NATIONAL HEALTH DISPARITIES: HEALTHCARE AND SEXUAL MINORITIES

While federal health data on LGBT populations has been severely limited, a number of key health issues have been identified as areas that disproportionately affect the LBGT community. These issues include healthcare coverage and benefits, depression and mental health disorders, smoking, substance abuse, HIV/AIDS and other sexually-transmitted diseases (STDs), hate crimes, and breast cancer. Some of these key health issues are briefly discussed below.

Health insurance plans offered by employers may provide coverage to only legally-married heterosexuals or their dependents, leaving many same-sex couples unable to cover their domestic partner or partner’s children on their health insurance. Many recent state anti-gay marriage initiatives have specifically targeted domestic partner benefits. Bradford and Ryan (1988) found that lesbians were more likely to be uninsured or under-insured than the general population and that they faced additional difficulties associated with lower socioeconomic status. Other studies also found that lesbians and gay men struggle due to lack of insurance coverage when compared to heterosexuals, with transgender individuals the most likely of all groups to be uninsured (Diamont, Wold, Spritzer, & Gelberg, 2000; Stall, 2000).

Adult members of the sexual minority community were found to have experienced increased social isolation and higher rates of depression and stress-related conditions when compared to their heterosexual counterparts (Dean et al., 2000).

LBGT youth are frequently the objects of bullying and harassment by their peers (Thurlow, 2001; Wilson, Griffin, & Ouellett, 2003). The Centers for Disease Control (CDC) reported that, nationally, gay male adolescents are two to three times more likely than their heterosexual peers to attempt suicide (2008). The National Longitudinal Study of Adolescent
Health, which surveyed over 12,000 teens, found that gay males were 68% more likely and lesbian-identified teens were twice as likely to attempt suicide as their heterosexual peers (Russell and Joyner, 2001). Several studies (Blake et al., 2001; Goodenow et al., 2002; Russell et al., 2002; Russell & Joyner, 2001) noted greater risk for psychosocial problems including social isolation, drug addiction, sexual risk taking behaviors, mental illness, and suicide for LBGT youth compared to their heterosexual peers.

Blake et al (2001), in a study of 3,500 students, found that lesbian, gay, and bisexual youth were more likely to report earlier ages for first sexual intercourse, more sexual partners, higher pregnancy rates (in efforts to “prove” their sexual orientation, teens may engage in opposite-sex sexual encounters) and more frequent substance abuse than their heterosexual peers.

Garofalo, Wolf, Kessel, Palfrey, & DuRant (1998), in an expansion of the 1995 Centers for Disease Control and Prevention Youth Risk Behavior Survey, conducted on an anonymous survey of 4,159 public high school students in Massachusetts and found that teens who identified as gay or lesbian showed a higher rate of smoking than the general population. Mays et al. (2002) also found that adult lesbian and bisexual women were more likely to report that they smoked tobacco products and were more likely to be overweight than their heterosexual counterparts.

Goodenow, Netherland, and Szalacha (2002), in comparing three different cohorts (1995, 1997, 1999) of the Massachusetts Youth Risk Behavior Survey, found that males identifying as bisexual and who were sexually active were five times more likely to have sexually-transmitted diseases than their heterosexual peers. Additionally, males who reported having had four or more sexual partners or having been forced to participate in sex were less likely to use condoms than their peers.
Some studies have reported heavier alcohol consumption and more alcohol-related problems in lesbians and gay men when compared to the general population (Bradford & Ryan, 1987; Fifield, Lathan, & Phillips, 1977; Lohrenz, Connely, Coyne, & Spare, 1978; Mays et al., 2002; McKirnan & Peterson, 1989; Skinner, 1994). While these studies tend to be small non-representative samples focused on substance abuse by gay men or lesbians rather than inclusive of bisexual and transgender populations, they are indicative of important healthcare disparities that require further study.

More recent studies (Murphy, 2000; Rosenberg, Mauer, Sorlie, et al., 1999) suggest that factors leading to ineffective coping methods in the context of social stigma need to be further examined in order to understand how sexual minorities differ from heterosexuals in terms of alcohol, tobacco, and drug-related problems. LBGT individuals use alcohol and other drugs for many of the same reasons as their heterosexual peers: to reduce stress, to experiment, to inflate feelings of self-esteem or adequacy, or to self-medicate for underlying problems.

Federal data on information about sexual orientation and substance abuse is lacking. The Gay and Lesbian Medical Association’s (GLMA) Companion Document for Lesbian, Gay, Bisexual, and Transgender (LGBT) Health (2001) noted that “the two most commonly cited substance abuse data sets — the National Household Survey on Drug Abuse and the Monitoring the Future Study — at present do not include sexual orientation or gender identity as demographic variables in their data sets, nor do they ask questions that would yield data for the different populations within the LGBT community” (p. 231). One recommendation to come out of the report was that the addition of sexual orientation information to existing substance abuse categories such as alcohol and illicit drug use by adolescents, illicit drug use by adults, and binge
drinking by adults, would help to increase our knowledge of how substance abuse patterns may differ within the LBGT population as compared to the general population.

Risk factors for sexual minorities vary greatly depending on individual sexual practices and behaviors. The Gay and Lesbian Medical Association (GLMA) (2001) noted that additional research is needed especially in MSM and transgender populations to increase understanding of how their sexual risks differ from those of other populations. For instance, risk factors would be higher in a sample of gay males who self-report that they engage in high-risk sexual behaviors (Semple, Patterson, & Grant, 2003) or who self-report that they abuse drugs or alcohol (CDC, 2008). Evidence of social stigma due to the initial clustering of HIV transmission in the United States in gay male communities has been well documented in the professional literature. In the early years of the epidemic, many gay men experienced harassment. Those infected or perceived to be HIV-positive, encountered social stigma and increasing isolation and were often abandoned by family, friends, and former lovers (Sontag, 1989). Also reported were risks of eviction from their rental units, or losing their jobs if employers discovered their HIV status (Deuchar, 1984; Siegel, 1986; St. Lawrence, Husfeldt, Kelly, Hood & Smith, 1990). Loss of health insurance upon testing positive for HIV was common in the early years of the epidemic (Herek, 1998). Although rare, there have also been case reports of HIV transmission from woman-to-woman contact (Kwakwa & Ghobrial, 2003; Rich, Buck, Tuomala, & Kazanjian, 1993).

Bauer and Welles (2001), found that both lesbians’ and healthcare practitioners’ assumptions about low-risk sexual behaviors and low transmission rates for STDs usually ignored the fact that 74% of self-identified lesbians reported they have had male sexual partners in their lifetime and 98% of bisexual women reported prior or current male sexual contact. Results from a study that reviewed 80,000 research trials (available through the
ClinicalTrials.gov database) sponsored by the “National Institutes of Health, other governmental agencies, and private industry” (Egleston, Dunbrack, & Hall, 2010, p. 1054) concluded that researchers conducting research on sexual function, frequently exclude gays and lesbians from clinical trials. One reason noted was reluctance by researchers to inquire about sexual practices of sexual minorities.

Proportionally, women have been underrepresented in traditional healthcare research. Lesbian and bisexual women face additional obstacles in scientific research studies from “a medical and scientific establishment that often dismisses the validity of their healthcare concerns” (HRC, 2008). A 2002 report of LBGT health issues by the New York City Department of Health and Mental Hygiene (DOHMH) found that, although data suggest that lesbians are at elevated risk for breast cancer, the risk factor is not being a lesbian per se. Regardless of sexual orientation, risk factors for higher breast cancer rates are correlated with never having given birth, heavy drinking, and being overweight. Lesbians can embody these risk factors for breast cancer.

Mays et al (2002) found that adult lesbian and bisexual women were less likely than heterosexual women to receive routine gynecological exams and healthcare. Ryan & Bogard (1994) found 35 to 45% of lesbians who participated in their national study reported that they lacked regular gynecological care. The New York City DOHMH report also supported this tendency of reluctance to seek preventative healthcare and regular gynecological exams, which can impact early detection and successful treatment of breast cancer, may be help explain why lesbian populations are showing higher breast cancer rates than their heterosexual peers (DOHMH, 2002).
The national neglect of the healthcare needs of lesbians was the primary topic of the 1994 U.S. Department of Health and Human Services’ Lesbian Health Roundtable Discussion. This resulted in specific goals and recommendations to the National Institutes of Health (NIH) to expand research opportunities to those who are willing to include lesbians and begin to track sexual orientation data within healthcare research. One of the first pilot studies regarding differences between heterosexual women and lesbian health was the Epidemiologic Study of Health Risk in Lesbians (ESTHER) project. The ESTHER project was first started in 1998, by primary investigators Drs. Deborah Aaron, Michelle Danielson, and Nina Markovic. The ESTHER Project was the first funded project by the National Institutes of Health, designed to access health related behaviors and self-described health status of lesbian women compared to their heterosexual peers in the greater Pittsburgh PA area (Aaron et al., 2004). This project has grown into one of the most extensive research projects comparing heterosexual and lesbian women on a variety of health behaviors and health risks. One of the research objectives of the ESTHER Project is to “determine if there are differences between lesbians and heterosexual women in the prevalence of known risk factors for cardiovascular disease, including cigarette smoking, physical activity/fitness, alcohol use, obesity, blood lipids, blood pressure, stress and depression” (Aaron, Markovic & Danielson, 2004, p. 58).

3.3 TRENDS IN TRACKING NATIONAL HEALTHCARE DISPARITIES AND SEXUAL MINORITIES

In the United States, disparities between heterosexuals and sexual minorities in healthcare have been noted within published government reports for some time. The 1979 publication of Healthy
People: The Surgeon General's Report on Health Promotion and Disease Prevention provided a national assessment of health risks, health outcome goals across the lifespan (from infant to elder), illness prevention, and health promotion (US Department of Health, Education, and Welfare, 1979). Reflective of the times, homosexuality is referenced only twice in this report, both times in connection to sexually transmitted diseases. The first reference to homosexuality warned that "although unchecked syphilis can have serious consequences, the availability of penicillin and an organized control effort have almost eliminated it in the general population, certain groups, however – including homosexuals, migrant workers, and the poor – remain at high risk" (p. 145) for sexually transmitted diseases. The second reference to homosexuality noted the lack of curriculum and training for healthcare providers and judgment about at-risk populations as obstacles to disease prevention:

Substantial difficulties hinder control of sexually transmissible diseases. Feelings of guilt or shame can make it difficult for some patients to seek proper care. Professional and paraprofessional training related to the diseases has never been a priority in curriculum development. Some health professionals find it difficult to provide care in a straightforward, nonjudgmental manner. In addition, these diseases may receive less attention because they are most prevalent in groups without significant political influence – the young, minority groups, inner city dwellers, and homosexuals" (United States Department of Health, Education, and Welfare, 1979, p. 145).
Many public health initiatives advanced during the 1980's emphasized public awareness and personal responsibility for healthy and wise lifestyle choices. This shift in our national healthcare focus to the prevention of disease was reflected in the "Just Say No" anti-drug campaign initiated by the Reagan administration, and was quite successful in public education efforts teaching that cigarette smoking is a major contributor to many poor health outcomes (US Department of Health and Human Services [DHHS], "Julius B. Richmond"). The 1980 publication of *Promoting Health/Preventing Disease: Objectives for the Nation*, from the Public Health Service (DHHS, 1980), in outlining a ten year plan, recommended improving national health data to track progress toward outcome goals, and noted that baseline data was "unavailable" (p. 27) for many of the proposed national goals, such as reduction of Hepatitis B transmission rates. The report emphasized developing risk reduction measures for specific populations, calling for "pre-service and continuing professional education for health providers and health educators to deal with sexually transmitted diseases in a confidential, non-judgmental fashion" noting that this was especially important for special at-risk groups like homosexuals to prevent future infections (p. 26). The report also called for examination of health professionals' knowledge and competency in identifying and responding to "sexually transmitted diseases by specialty boards, certifying agencies and other regulatory boards" (p. 27).

Specific differences in national health outcomes due to sexual orientation were again mentioned only in the context of men with sexually transmitted diseases, although the emphasis now was on reducing Hepatitis B rates and reported that "homosexual men are at very high risk; nearly 60 percent attending sexually transmitted disease clinics show evidence of past or present Hepatitis B infections". The report also noted this "same population is also at very high risk of several other sexually transmitted diseases, including amebiasis and giardiasis" which
contributed to "great strain upon the resources of local health departments during the 1970s" (p. 25).

With each decade, health data reporting measures improved and the Department of Health and Human Services worked to understand health disparities and priority issues that affect different populations within the United States. With the 1991 publication of Healthy People 2000: National Health Promotion and Disease Prevention Objectives (DHHS,1991), the U.S. Department of Health and Human Services continued to make assessments of the health of the nation and recommendations of ten-year goals to improve health outcomes within the United States. Yet in 1991, the terms gay, lesbian, sexual orientation, and homosexuality are absent from the index of content covered within the text, nor recognized as one of the “special populations” defined as "people with low income, blacks, Hispanics, Asians and pacific islanders, American Indians and native Americans, [or ] people with disabilities" (DHHS,1991, p. viii) identified as having health disparities that differed from the general population. The only references to sexual minorities still was in connection to sexually transmitted diseases although the word choice reflected an increased understanding that sexual behaviors (for instance, men who have sex with men) were different than sexual identity (i.e. gay) since it specifically mentioned that sexual partners of either gender could be at risk for infection. Sexual minority references included “men who have sex with men and their male or female partners” (DHHS,1991, p. 481) when referencing HIV transmission; "gay and bisexual men" when noting the number of diagnosed AIDS cases (DHHS,1991, p.482); “blood samples taken and analyzed in these clinics suggest that a substantial decline in the incidence of new infections in homosexual men has occurred” and “considerable evidence points to reduced high-risk sexual behavior among white homosexual men, although data show some relapse to high-risk behavior
in this group and continued risk-taking behavior among gay youth” (DHHS,1991, p.483); “decreases in reported syphilis noted through 1986 were caused in part, by behavior changes among homosexual men in response to the HIV epidemic” (DHHS, 1991, p.500); and finally, regarding Hepatitis B, “the people who account for most of the cases- intravenous drug abusers, sexual partners of infected homosexuals, and homosexual men- are not being reached effectively by current vaccination programs (DHHS,1991, p.502).

The latest edition of this report, published in 2000, Healthy People 2010 (HP2010), reiterated a compelling need to address health inequality and healthcare disparities within the existing U.S. healthcare system (DHHS, 2000a). Recommendations by healthcare experts from across the U.S. were compiled to create HP2010. The premise of HP2010 is that every person in our nation "deserves equal access to comprehensive, culturally competent, community-based healthcare systems that are committed to serving the needs of an individual and promoting community health" (DHHS, 2000a, p. 11) The HP2010 report had twin goals. One goal was to eliminate existing health disparities based on demographic differences among individuals in the United States. These demographic factors included gender, race, ethnicity, education level, income, disability status, geographic location, and sexual orientation. HP2010 noted that health professionals' attitudes about sexual orientation may contribute to existing healthcare disparities. The second goal of the HP2010 report was to increase quality of health and longevity of life for individuals across the country.

HP2010 identified twenty nine leading health indicators for the United States including, but not restricted to, measures of obesity, cigarette smoking, illicit drug use, binge drinking, and responsible sexual behavior. It stated that
the Leading Health Indicators are intended to help everyone more easily understand the importance of health promotion and disease prevention and to encourage wide participation in improving health in the next decade. Developing strategies and action plans to address one or more of these indicators can have a profound effect on increasing the quality of life and the years of healthy life and on eliminating health disparities—creating healthy people in healthy communities. For each of the Leading Health Indicators, specific objectives derived from Healthy People 2010 will be used to track progress (...) and whether sexual orientation is in the data template. "DNC" in the template means that the data currently are not collected by the data system being used to track the objective (p. 10).

*Healthy People 2010* was the first government report to recognize sexual orientation, rather than referring strictly to homosexuality and also the first to mention that lesbian health concerns differ from gay males stating

America's lesbian and gay population comprises a diverse community with disparate health concerns. Major health issues for gay men are HIV/AIDS and other sexually transmitted diseases, substance abuse, depression, and suicide. Gay male adolescents are two to three times more likely than their peers to attempt suicide. Some evidence suggests lesbians have higher rates of smoking, overweight, alcohol abuse, and stress than heterosexual women.
The issues surrounding personal, family, and social acceptance of sexual orientation can place a significant burden on mental health and personal safety. (DHHS, 2000a p.16)

While this was a definite improvement over previous government studies in acknowledging that there might be other healthcare concerns within the LBGT community aside from gay males and risks of sexually transmitted diseases, it also highlights how little LBGT healthcare was on the national agenda as recently as ten years ago.

Of particular importance to this study is a publication produced by the Gay and Lesbian Medical Association (GLMA, 2000) titled the Healthy People 2010 Companion Document for Lesbian, Gay, Bisexual, and Transgender Health which cited specific concerns about institutional discrimination in the interactions of the healthcare system for sexual minorities. The HP 2010 companion document noted that the Federal government lacked the basic data needed to ascertain and measure the impact of discrimination for sexual minority communities.

Despite federal government requests that each state collect sexual orientation demographic data in order accurately to measure national progress toward Healthy People 2010 objectives, each of the twenty nine health indicators that were tracked by each state lacked sexual orientation data. At the time the companion document went to press (Gay and Lesbian Medical Association, 2000, p. 10) all twenty nine health objectives outlined as indicators for public health throughout the country were officially recorded as "data not collected" (DNC) for sexual orientation. State and federal data collection accounting for sexual orientation is important because it can reveal substantial differences between heterosexual and LBGT community responses to such questions as "condom use by adults," "illicit drug use by adults," "binge drinking by adults," or "treatment for adults with recognized depression." Obtaining national data
is crucial if healthcare professionals are to be successful in reducing health disparities experienced by sexual minorities. The lack of data on sexual orientation negatively affects accurate measure of progress toward national goals, planning of effective public health policies, and educational programs for future healthcare professionals. National health data influences how issues are conceptualized and addressed by public health providers and researchers. It can affect how health programs are advertised and how the public responds to specific programs.

Since sexual orientation data was unavailable at the Federal level as an effort to encourage the Federal government to consider national implementation of specialized educational and programs designed for the LGBT community, the HP 2010 Companion Document reviewed small innovative community outreach health programs for sexual minorities that addressed such health related issues as cancer screening, tobacco cessation, and HIV/AIDS prevention. One such program was the Urban Men's Health Study (2000) which found that many men who would have sex with men (MSM) did not necessarily self-identify as gay. Members of the University of Pittsburgh's Center for Research on Health and Sexual Orientation ([CRHSO], 2008) implemented changes to enhance the local Pitt Men's Study, and included revamping advertising campaigns on HIV prevention and information.

The need for specialized outreach and culturally-specific education and treatment approaches in order to address appropriately other LGBT health disparity concerns such as substance abuse, obesity, HIV/AIDS and other sexually transmitted diseases was emphasized by the Gay and Lesbian Medical Association (2000). One tangible benefit of having federal data that tracked health indicators by sexual orientation is that it would provide healthcare professionals with the information necessary to develop and refine culturally-specific programming and to monitor the effects that these programs on national health.
3.4 DISCLOSURE OF SEXUAL ORIENTATION TO HEALTHCARE PROVIDERS

Consistently remarked upon throughout the Healthy People 2010 (HP2010) Companion Document for Lesbian, Gay, Bisexual, and Transgender Health (GLMA, 2000), was the need for respectful and nonjudgmental communication between healthcare providers and their LBGT clients. Provider reactions to sexual minorities can either encourage or dissuade patients when seeking healthcare. Healthcare professionals can share the same cultural biases that contribute to the reluctance of sexual minorities to seek healthcare services. Potter (2002), an openly lesbian physician and educator, published vignettes of her own experiences with various healthcare practitioners in order to challenge stereotypes and improve providers’ sensitivity when communicating with lesbian and gay patients. Potter recommended future empirical research studies explore anticipated disapproval about “lifestyle choices,” blatant homophobia, or assumptions of heterosexuality by healthcare providers to determine if they were predictors of sexual minorities avoiding regular contact with healthcare professionals.

Saulnier (2002), in an exploratory study of a lesbian community served by the Lesbian Healthcare Project of Western New York, lead focus group discussions with 33 lesbian key informants from working class, middle class, African-American, youth, elder, and lesbian bar communities. Participants were identified using convenience and snowball sampling techniques. Many of the participants expressed concerns about how sexual orientation was going to be recorded in their medical record and who would have access to that information. Saulnier reported that for these lesbian participants, a healthcare provider’s sexual orientation was less important than their understanding of social issues that negatively affected lesbians. Participants seeking physical or mental health services reported they had experienced a wide variety of provider reactions to their sexual orientation. Some of the women in the focus groups reported encountering blatant
homophobia from healthcare providers. Others questioned heterosexist assumptions about relationship status on intake forms that requested information as “single, married, divorced, or widowed” (p. 360). Saulnier (2002) concluded these experiences contributed to the invisibility of lesbian lives and may help explain reluctance of sexual minorities to seek out healthcare providers. Saulnier noted some respondents reported tolerance, sensitivity, or affirmation by their healthcare provider, such as a healthcare practitioner who followed up questions about birth control use with “are you celibate or are you gay” (p. 361). Participants shared that healthcare provider’ reactions to their sexual orientation influenced whether or not they planned to seek out future healthcare. This finding was most noted by participants who had experienced negative reactions to their sexual orientation by their healthcare provider.

Similar findings (Caldwell, 1991; Klitzman & Greenberg, 2002; Greene & Herek, 1994) support sexual minorities have experienced wide variation in their ability to engage in honest communication with healthcare professionals, and that reluctance to disclose sexual orientation was more likely for individuals who had encountered negative attitudes in the past from other healthcare providers. White & Dull (1998) found difficulty communicating with healthcare providers was associated with delays in seeking preventive care or regular medical care, increasing the chances for sexual minorities of undetected health problems or complications to chronic health problems.

Meckler et al. (2006) surveyed 131 youth aged 14 to 18 years who identified as lesbian, gay, or bisexual during a community-based conference. They found that among the youth who could attend this conference on LBGT empowerment, only 35% had ever discussed their sexual orientation with their healthcare provider. The strongest predictor of disclosure of sexual orientation was simply being able to discuss sex or sexual health with healthcare providers. When
questioned about how healthcare providers could encourage youth to discuss sexual orientation and sexual health 64% of participants responded “just ask me.”

This pattern of difficulties in having frank, honest, accepting communication with healthcare providers is a concern for sexual minorities across the lifespan. Many older LBGT individuals have endured anti-gay discrimination in the past and fear disclosure of their sexual orientation especially if reliant upon nursing homes or senior centers (Price, 2005). In a study conducted in 2001, 75% of lesbian and gay elders admitted they did not disclose their sexual orientation to their healthcare providers (Shippy, Cantor, & Brennan, 2001).

Sexual minorities potentially risk negative attitudes about their sexual orientation with each encounter with a new healthcare provider. For example, LBGT individuals could have a supportive primary care physician, but an unexpected medical emergency may necessitate interactions with potentially biased healthcare providers. The decision to come out to healthcare providers has ripple effects, including concerns as to how that healthcare professional will treat the individual and his or her family members. Such concerns may contribute to why sexual minorities are less likely to pursue preventive and medical screening services. Millman (1993) concluded that sexual minorities encounter multiple layers of potential discrimination, as well as personal, financial, institutional, and cultural barriers as they attempt to obtain competent, sensitive healthcare. This negative social context, when reinforced by legal discrimination, was identified by the United States Department of Health and Human Services (2000b) as placing "a significant burden on mental health and personal safety" for most sexual minorities seeking medical care.
3.5 PITTSBURGH’S LOCAL LESBIAN, GAY, BISEXUAL, AND TRANSGENDER COMMUNITY

Many healthcare students could remain within the surrounding area once finished with their academic training. Since the study is limited to healthcare students trained at the University of Pittsburgh, what follows is a brief overview of the local lesbian, gay, bisexual, and transgender community resources and results from needs assessment for the sexual minority community of Pittsburgh and the surrounding area conducted in 2003.

Pittsburgh is, historically, a blue-collar town, but there have been substantial changes to resources available to the LGTB community over the past twenty years. The Gay and Lesbian Community Center (GLCC) of Pittsburgh (2010) provides opportunities for LGTB individuals across the lifespan including youth and elder programming, community social events, and providing resources for smaller nonprofits that service the LGTB community. Pittsburgh is also home to Persad Center. Persad Center was established in 1972 and is now the second oldest counseling agency in the United States that specifically provides services to the LGTB community (Persad, 2010).

In 2003, a local needs assessment for the sexual minority community of Pittsburgh and the surrounding area (Quinn et al., 2003) was based on a Community Diagnosis model that holds "members of a community have expertise concerning their community, culture, and health problems, and they know what solutions are likely to work. The health professional and the client community are equal partners in the development, implementation, and evaluation process" (Steckler, Dawson, Israel, & Eng, 1993, p. S8). A spirituality task force formed as a result of the 2003 study consisting of several local churches and synagogues who pledged as Affirming Congregations to ensure they welcomed the LGTB community.
This report found that little content about sexual minorities was included within curricula of any of the healthcare-related schools at the University of Pittsburgh. Among other findings, it reported that during a four-year curriculum, the School of Medicine required only a single 2.5-hour mandatory session on sexual health training, fifteen minutes of which were devoted to discussing LBGT sexual health issues.

As part of preparations for reaccreditation for the School of Social Work during the 2003/2004 school year, the curriculum was examined for explicit and implicit content about sexual minorities for compliance with Council for Social Work Education (CSWE) guidelines. The syllabi were examined for inclusion of any course objectives that directly mentioned gay or lesbian issues or referenced specific assignments or readings on LBGT content within the curriculum materials. Of the courses offered during the 2003/2004 school year at the University of Pittsburgh School of Social Work, only two of twenty-eight BSW and two of forty-two MSW courses required explicit and direct LBGT content for their students.

As part of compliance with accreditation standards established by the Liaison Committee on Medical Education (LCME), there have been increased efforts to address sexual minority healthcare needs during training at the University Of Pittsburgh School Of Medicine. Individual instructors at the medical school, have implemented panel discussions with LBGT community members for medical students over the past few years. In 2007, the first year of the program, students were divided into small groups and remained seated while eight LBGT community panelists moved from room to room in fifteen minute rotations. Panelists would answer questions and discuss both positive and negative experiences they had with healthcare providers before moving onto the next group. The second year (2008), LBGT panelists were assigned to groups for half-hour discussion sessions. Classroom content and discussion during these sessions can
vary widely depending on the experience and comfort level of the individual panelists, questions from the medical students, and prior knowledge of LBGT sexual practices and legal concerns. Further research is necessary to determine effective ways to educate all healthcare providers about health issues and experiences of sexual minorities.

3.6 ACADEMIC PREPARATION AND ACADEMIC CONTENT

Gay, lesbian, bisexual, and transgender individuals have historically experienced varying levels of social stigma, institutional discrimination, and devaluation of their relationships. One role of academic preparation for healthcare professionals is to equip students to be able to practice with the diverse range of people. Each healthcare profession can have vastly different reasons for attracting students to enter that profession. Some of these differences may include the requirements prior to admission to a training program attracts, curriculum emphasis, employment possibilities after training, potential for money or prestige once joining the profession, and number of years required for training prior to professional practice.

Students need both factual information about and opportunities to interact with diverse populations. There have yet to be enough empirical studies in any of the healthcare professions to draw meaningful conclusions about the best practices for academic preparation and its impact on attitudes toward gays and lesbians. Most of the research published about academic preparation and sexual minorities has been conducted on liberal arts undergraduate students. What literature is available is examined in this section.

Educational institutions have the potential to increase awareness, improve understanding of the impact of discrimination, and improve acceptance of lesbian, gay, bisexual, and
transgender individuals. Students and instructors share goals to improve their professional competency to work effectively with diverse populations. Several researchers found improved education is an effective means to sensitize both students and instructors to recognize and challenge institutionalized homophobia (Walters & Hayes, 1998; Kurdek, 1988, Serdaheley & Ziemba, 1984).

Educators can negate assumed heterosexuality by raising awareness about the effects of heterosexism and homophobia during classroom discussions (Robinson & Ferfolja, 2002). Individual educators can require class readings and assignments that include information about the sexual minority community in their curricula and classroom discussions (Silvestre, 1999). Instructors can include examples of gay, lesbian, bisexual, and transgender people during classroom discussions of oppression or discrimination.

Additional research is necessary to determine which educational format would be the most beneficial for fostering improved understanding, increased empathy, and positive attitudes about lesbians, gays, bisexuals, and transgender individuals for future healthcare professionals. Suggestions of unstructured social exchange and increasing social contact through panel presentations, small group discussions, or structured role-play need to be studied with pre/post testing for student attitudes.

A few small studies have found that viewing relevant movies about sexual minorities during class as beneficial in reducing negative student attitudes about non-heterosexual orientation (Cerny & Polyson, 1984; Duncan, 1988; Wells, Serdaheley,& Ziemba,1984; Wells, 1989). However, Kelley, Byrne, Greendlinger, & Murnen (1997), caution that, after viewing sexual content in films, women reported less positive sexual attitudes and more guilt about sexual behaviors (including masturbation and same-sex encounters), but less homophobia than
their male peers. Other studies have found if a film is simply shown to a class without follow up and classroom discussion it can actually decrease tolerance for same-sex behaviors (Goldberg, 1982; Wells, 1989).

When presenting information about sexual orientation, the attitude of the instructor was found to be critical to improve awareness, foster understanding, and model professional expectations within the classroom setting (Wells, 1989). Recommendations for academic institutions and accrediting bodies to review their educational policies often suggest increasing content about sexual minorities within academic settings (Cotten-Huston & Waite, 2000; Wald, Rienzo, & Button, 2002), but longitudinal research is needed in order to ascertain whether improving academic content or using different pedagogical approaches have any lasting impact on healthcare students or professional practice.

Negative public expression about sexual minorities has been called the "last socially acceptable prejudice" (Gaughn, 1992; p.612). Many academic institutions fail to address reports of homophobia-linked human rights violations on campuses, especially if perpetrated by their own students (Matchinsky, D.J. & Iverson, T.G, 1996; Hinrichs, D.W. & Rosenberg, P.J, 2002). Students can perceive campus climate as either reinforcing messages of tolerance and support or as hostile toward lesbian, gay, and bisexual individuals. In one study, Hinrichs & Rosenberg (2002) found that student perceptions of campus climate toward LBGT individuals was closely linked to messages from the leadership on the campuses about institutional values. One of the measures included in their study was the extent to which students felt comfortable associating with individuals identified as "deviant" within society. Categories included questions about socially stigmatized groups such as marijuana users, prostitutes, ex-convicts, people living with AIDS, and lesbians, bisexuals, and gay men. Males who participated in campus Greek
membership societies reported highly intolerant views about homosexual human rights. Students who commented phrases such as "homosexuals would have to live outside of my country" were coded as hostile. Students who expressed the most negative attitudes about homosexuals tended to live on college campuses that had social climates that reinforced anti-homosexual values (Hinrichs & Rosenberg, 2002).

The difficulty for academic programs is how to incorporate accurate information about sexual orientation during training programs for professionals without perpetuating pathological assumptions or stereotypes about sexual minorities. This is particularly difficult given the lack of federal data regarding lesbians, gay men, bisexuals, or transgender individuals. Academic institutions and curriculum content often reflect social trends and research goals that mirror changes in social attitudes. Abramovitz (1996) notes that identification as "other" has historically applied to individuals who did not conform to social rules, including "sexual deviants" (i.e., suspected or known homosexuals). Efforts to identify the etiology of homosexuality, aversion therapy techniques, or pharmaceutical intervention often reflect political or social agendas rather than peer-reviewed research on sexual orientation.

Research such measuring the effect of movie portrayals on general public audience attitudes toward non-heterosexual orientation (Mazur & Emmers-Sommer, 2002), documents how sexual orientation is perceived within our society and can track changes within social, historical, and political environments. Changes in academic research are also reflected in language choices and research topics under investigation.

In summarizing published social work articles that addressed homosexuality prior to 1980, Ben-Ari (1998) characterized the professional literature as focusing upon the "negatives" with articles addressing the difficulties experienced by sexual minorities, reflective of the
prevailing social viewpoint that homosexuality was a burden to be managed. Articles of this time period typically ended with a reminder to the healthcare provider that accepting the individual client was part of their professional duty.

We cannot expect healthcare professionals to understand the social issues that negatively affect the lives of lesbians, gays, bisexuals, and transgender individuals if they are not properly prepared and educated during their academic years. A recent review of the professional literature of dentistry, dental hygiene, medicine, and nursing, found the health professions still sorely lacking in effective methods to evaluate student knowledge of cultural competency concepts and ill-equipped to monitor student compliance with published standards for professional practice during their clinical experiences (Gregorczyk & Bailit, 2008).

Course content and academic debate about sensitivity needs of individuals historically delineated as "other" include terms such as multicultural education, global perspective, cultural diversity, cultural sensitivity, and cultural competency (Brookins-Fisher & Thomas, 2003; Dana & Matheson, 1992; Greenholtz, 2000; Marshall, 2001). Cultural diversity was defined as inclusive of such "human characteristics as gender, race and ethnicity, sexual identity, age, physical ability, social circumstances, and religion that result in identifiable differences in language, dress, behavior, or socialization" (Eliason, 2000, p. 161). One resource cited frequently for improving cultural competency content in academic programs is the United States Health Resources and Services Administration (HRSA) website for Cultural Competence Resources for Healthcare Providers (US-HRSA, 2010). This website provides resources for assessment tools, culture or language-specific content, health profession education, research guidelines, special populations, technical assistance, training curriculum samples, and web-based training. However, content regarding the lesbian, gay, bisexual, and transgender community is still primarily
focused on the prevention or management of sexually-transmitted diseases in men who have sex with men. Wells (1989, 2001) argues that what is lacking in nursing and other healthcare professions is academic content that addresses etiology, incidence, diversity of affection, behaviors, and expression, as well as institutional, social, legal consequences and discrimination that impact sexual orientation.

3.7 ACCREDITATION STANDARDS FOR THE HEALTHCARE PROFESSIONS

Each of the healthcare professions is guided by a discrete accrediting body that establishes and reviews criteria for standards of practice. Accreditation is a voluntary process by which educational institutions or programs are recognized as being in compliance with established professional standards and educational criteria. Accreditation standards can guide necessary curriculum changes, allocation of resources, or improvements to specific programs. Thus, similar to the ways in which schools of social work strive for compliance with the standards established by the Council for Social Work Education (CSWE), medical schools respond to the Liaison Committee on Medical Education (LCME) accreditation requirements, schools of dental medicine must meet the Commission on Dental Accreditation (CODA) requirements, and schools of nursing have as their accrediting body the National League for Nursing Accrediting Commission (NLNAC). Each of these accrediting organizations will be examined for specific requirements for inclusion of sexual minority educational content. It is important to remember that accreditation guidelines do not mean that every institution or program is currently in
compliance, but they mark the standard by which programs can be held accountable to their professional educational goals.

3.7.1 Council on Social Work Education

Since 1995 the Council on Social Work Education (CSWE) has mandated that social work curricula provide specific content regarding women, people of color, and gays and lesbians (CSWE, 1995; see Appendix III). Social work research designed to assess what effects education and curriculum changes have had among social work students revealed that social work students continued to self-report homophobic attitudes (Berkman, & Zinberg, 1997; Cramer, Oles, & Black, 1997; Lim & Johnson, 2001). Additionally concerning were findings that social work students reported that their life experiences or education had left them unprepared to work with sexual minorities, and that social work school environments greatly varied (ranging from unsupportive to openly hostile) in their incorporation of sexual minority issues within particular programs (Mackelprang & Hernandez-Peck, 1996).

These are hopeful signs of change within the profession. In a study that included 18.6% of all master's level social work students in accredited social work programs during the school year of 1999-2000, Newman, Dannenfeld, and Benishek (2002), found that all but 5.5% of the MSW student respondents at the beginning of their academic programs expressed positive attitudes toward and acceptance of lesbians and gay men. If this trend of increased acceptance of sexual minorities within social work students continues, published reports of negative attitudes and homophobia within the profession will decrease. Social work was the first of the healthcare professions considered within this study to adopt accreditation standards that specifically addressed sexual orientation. Education and training regarding sexual orientation needed to be
incorporated within social work curricula in order to assure that future social workers would be able to be competent professionals in providing services for sexual minorities. Newman, Dannenfeld, and Benishek (2002) caution "substantive and practice oriented content about lesbians and gay men" (p. 281), knowledge about appropriate resources, and awareness of relevant legislation or social policies that affect sexual minorities need to be monitored within social work programs" to assure that this trend continues.

As part of ongoing effort to address these and other educational gaps within social work, in 2008 CSWE adopted new Educational Policy and Accreditation Standards (EPAS) standards that were designed as a way to link conceptually and evaluate "program missions and goals; explicit curriculum; implicit curriculum; and assessment" (CSWE, 2010, p. 1) within baccalaureate and master’s degree social work programs. Within this 16 page document, sexual orientation is specifically addressed twice in the policies designed to guide professional social work education. The latest CSWE guidelines now require schools of social work incorporate material so social work students "understand how diversity characterizes and shapes the human experience and is critical to the formation of identity. The dimensions of diversity are understood as the intersectionality of multiple factors including age, class, color, culture, disability, ethnicity, gender, gender identity and expression, immigration status, political ideology, race, religion, sex, and sexual orientation" (CSWE, 2010, Educational Policy 2.1.4, p. 4-5).

The second education policy to address sexual orientation specifies a "program’s commitment to diversity—including age, class, color, culture, disability, ethnicity, gender, gender identity and expression, immigration status, political ideology, race, religion, sex, and sexual orientation—is reflected in its learning environment (institutional setting; selection of field education settings and their clientele; composition of program advisory or field committees;
Additionally CSWE guidelines mandate that social workers receive training in how to advocate for human rights and social and economic justice noting "each person, regardless of position in society, has basic human rights, such as freedom, safety, privacy, an adequate standard of living, health care, and education. Social workers recognize the global interconnections of oppression and are knowledgeable about theories of justice and strategies to promote human and civil rights. Social work incorporates social justice practices in organizations, institutions, and society to ensure that these basic human rights are distributed equitably and without prejudice. (CSWE, 2010, Educational Policy 2.1.5, p. 5).

These policies represent attempts to assure that future generations of social workers will no longer be able to report hostile social work school environments, homophobic attitudes, or that they were unprepared to work with sexual minorities.

3.7.2 Liaison Committee on Medical Education

Calls for improved diversity training and cultural competency for medical students have been based on growing awareness of the influence these have on a patient's prognosis (McGarry, 2009; Boucot-Cummings, 1999). Notably, the driving force behind changes in medical school educational requirements has been patient-driven, with a recognition of the impact that cultural competence has on a practitioner's ability to provide service that "values, respects, and enhances
the cultural identities of those under their care" (p. 186-7) in an increasingly multicultural environment (Prideaux & Edmondson, 2001).

The Liaison Committee on Medical Education (LCME, 2009) oversees the standards for medical education programs while the Accreditation Council for Graduate Medical Education (ACGME) oversees specialized post-MD graduate medical programs within the United States and Canada (ACGME, 2010). The ACGME policies and procedure guidelines, adopted on February 8, 2010, does not specify any particular content about multicultural, cultural diversity, sexual orientation, homosexuality, lesbian, gay, bisexual, or transgender issues for post MD training. In fact, mention of diversity within the accreditation document is limited to "ensure diversity of expertise" (p. 24) when selecting the editor-in-chief and associate editors for the ACGME journal, and to "consider professional qualifications, geographic distribution and diversity in nominating their candidates" (p. 63) for residency review committee members. Thus, only the LCME accreditation guidelines will be reviewed for this study.

The LCME provides guidelines for the institutional settings, educational program for the M.D. degree, medical students, faculty, and educational resources (LCME, 2009, p. 1-24). Content has historically emphasized clinical information over cultural issues, but that has been changing rapidly, with elective courses specific to addressing the needs of diverse patients being added to medical school curricula (LCME, 2007, p. 3).

In 2000, the LCME adopted two accreditation standards on cultural diversity curriculum and student learning outcomes, but neither clearly stipulates that sexual minorities are included within the definition of cultural diversity. In fact, the LCME defines cultural diversity as "including, but not limited to: gender, racial, cultural and economic" differences (LCME, 2009, Section IS-16, p. 6) The standard on cultural diversity curriculum states "the faculty and students
must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments" and that "all instruction should stress the need for students to be concerned with the total medical needs of their patients and the effects that social and cultural circumstances have on their health. To demonstrate compliance with this standard, schools should be able to document objectives relating to the development of skills in cultural competence, indicate where in the curriculum students are exposed to such material, and demonstrate the extent to which the objectives are being achieved" (LCME, 2009, Section ED-21, p. 10).

Because of inclusion of requirements for cultural diversity in the new LCME accreditation standards, Tang, Fantone, Bozynski, & Adams (2002) argue that, increasingly, "medical educators will be expected to design, implement, and evaluate curricula in sociocultural medicine. These initiatives will raise several challenges: Which faculty will teach these curricular programs and how will they be trained? Given the training level of students, what teaching approaches yield optimal learning? How will the efficacy and educational impact of these curricular programs be evaluated?" (p. 580). Similar questions and issues will need to be confronted by all the healthcare professions if their practitioners are to remain effective within an increasingly diverse society.

Gregorczyk & Bailit (2008) point out that the Association of American Medical Colleges' (AAMC) Tool for Assessing Cultural Competency Training (TACCT), implemented in response to the new standards, was only designed to compare course content between medical schools and assure educators that their courses were compliant to LCME standards in offering information about cultural diversity. It is important to understand that the TACCT tool was not designed to measure students' competency in other healthcare professions nor individual students’
knowledge of cultural competency concepts. It is also not an effective means to evaluate student compliance with professional guidelines regarding cultural diversity. Gregorczyk & Bailit (2008) argue that such measures have yet to be designed, evaluated, or implemented as standard practice during any professional training program.

Since June 2008, LCME guidelines have called on medical schools to increase the recruitment of diverse medical school applicants and to maintain policies and practices that support diversified student, faculty, and staff environments. This was done "in the belief that future physicians will be best prepared for medical practice in a diverse society if they learn in an environment characterized by, and supportive of, diversity and inclusion" (LCME, 2009, Section IS-16 p. 5). While these improvements are noteworthy, this latest version of LCME standards does not mandate any specific curriculum content or treatment considerations regarding lesbian, gay, bisexual, transgender, or queer individuals. It does, however, specify the phrase “sexual orientation” once in a general non-discrimination policy reference in "the admissions process for medical school applicants and throughout medical school…on the basis of gender, sexual orientation, age, race, creed, or national origin" (LCME, 2009, Section MS-31, p. 19).

In the absence of specific guidelines mentioning sexual orientation, some authors, such as Tang, Fantone, Bozynski, & Adams (2002) and Tang, Bozynski, Mitchell, Haftel, Vanston, & Anderson (2003), have, when investigating best practice methods for medical training, assumed that the new cultural diversity guidelines are implicitly meant to be inclusive of sexual orientation issues. In fact, Tang, Fantone, Bozynski, & Adams (2002) emphatically state "as medical educators, we conceptualize cultural diversity as an all-inclusive term that captures factors such as gender, race, ethnicity, sexual orientation, religion, residential setting (urban versus rural), economic circumstance, environmental condition, and/or spirituality. Given this
framework, we use the term ‘sociocultural medicine’ in reference to the understanding, incorporation, and application of social and cultural issues in health, medicine, and patient care (p. 580). In a study that followed 148 medical students who completed a pre/post model program that expanded curriculum coverage of sociocultural issues during a four year medical education program, Tang, Fantone, Bozynski, & Adams (2002) noted that students had improved attitude scores about social and cultural diversity issues; students reported they had increased exposure to the variety of healthcare disparities faced by patients within the United States which would become increasingly necessary as the population "diversifies with respect to ethnic, cultural, social, economic, and religious backgrounds" (p. 583).

In another study comparing faculty members’ and residents’ attitudes toward diversity and sociocultural issues in medicine, Tang, Bozynski, Mitchell, Haftel, Vanston, & Anderson (2003) found that resident’s reporting of positive attitudes and ease in addressing sexual orientation with patients was related to having had access to previous diversity education, which was notably lacking in more senior members of medical school faculty. Based on these findings, they argue that "sociocultural diversity in medical education is a priority" (p. 587) and recommended integrating diversity education across the medical education continuum to benefit patients, current medical students, and the broader medical community.

3.7.3 National League for Nursing Accreditation Commission

NLNAC, Inc., is the professional accrediting body for all levels of nursing programs from licensed practical to clinical doctorates (NLNAC, 2008), and oversees nursing curriculum development. Similar to both the medical and dental curriculum standards, within the 2008 standards for NLNAC there is no mention of sexual orientation, sexual diversity, nor are there
specific mandates for training or curriculum content on sexual orientation. However, under the heading of "Welfare of Faculty and Staff," there is an umbrella statement that may be indicative of nondiscriminatory nursing practice but does nothing to specify nursing curriculum content. It reads that nursing practice should strive for "policies affecting governing organization and nursing education units including but not limited to: non-discrimination, appointment, rank, grievance, promotion, rights and responsibilities, salaries/benefits, and workload" (NLNAC, 2008, p. 140).

Published articles in nursing journals regarding sexual orientation have suggested that a positive attitude toward gays and lesbians by this profession’s practitioners is imperative to good nursing practice (Eliason & Raheim, 2000; Nugent, Childs, Jones, Cook, & Ravenell, 2002; Schwanberg, 1996, Taylor, & Robertson, 1994). Some authors have chosen to focus on specific cases of poor treatment of gays and lesbians either in nursing education or in the provision of nursing care, in an effort to convince nurses to provide more sensitive care to sexual minorities in line with stated nursing codes of ethical practice to provide compassion and respect to all patients in their care (Eliason, 1996, Jackson, 1995; Spinks, Andrews, & Boyle, 2000; Taylor & Robertson, 1994).

In a study of over 200 nursing students conducted by Eliason & Raheim (2000), respondents reported that they were most uncomfortable when having to work with diverse cultural groups with whom they had little exposure or experience during their nursing education. Not surprisingly, nursing students reported negative emotional responses, social disapproval, and greater discomfort when they personally disapproved of a patient’s sexual orientation.

Another pilot study designed to measure cultural competency as reported by 236 nursing students enrolled across bachelors', masters’, and doctoral programs, reported that the nursing
profession needed to focus on the development of measurement tools with research that could test psychometric properties in order appropriately to measure "cultural competency" throughout the nursing education process. Additional research was recommended to determine how cultural competency were applied to professional nursing practice (Krainovich-Miller, Yost, Norman, Auerhahn, Dobal, Rosedale, Lowry & Moffa (2008).

3.7.4 Commission on Dental Accreditation

The Commission on Dental Accreditation CODA (2008) oversees the standards for curricula adopted in dental, advanced dental, and allied dental programs. Similar to other professional accrediting bodies, CODA provides guidelines for the institutional effectiveness, educational objectives, faculty and staff qualifications, and recommendations of educational resources (CODA, 2008, p. 1-31).

CODA has a general standard regarding multicultural issues which reads "Graduates must be competent in managing a diverse patient population and have the interpersonal and communication skills to function successfully in a multicultural work environment." (CODA, 2008, Standard 2-17, p. 13). As the LCME medical school standard, however, there is no evidence as to whether this definition of multicultural competency is meant to be, or indeed meant not to be, inclusive of sexual orientation. Evidence of the need specifically to include sexual orientation within CODA standards comes from a study that explored how dental students in the United States and Canada perceived their education to provide care for lesbian, gay, bisexual, or transgender patients and their perception of their dental schools’ institutional climates with regard to diverse sexual orientation. The study found that students from only 4 out of 30 dental schools reported having exposure to sexual orientation issues during their curricula
for dental training (Anderson, Patterson, Temple, Inglehart, & Habil, 2009, p. 108). Student respondents from only three schools agreed that their "curriculum should include more education about treating patients from non-heterosexual backgrounds" (Anderson, Patterson, Temple, Inglehart, & Habil, 2009, p. 108), which perhaps is not unexpected given the majority of students reported they had not been exposed to LBGT issues during their dental school education. Analysis of student responses to dental school climate questions (defined in this study as "the shared beliefs and values that guide the thinking and behavior of members of the dental school community" (Anderson, Patterson, Temple, Inglehart, & Habil, 2009, p. 105) revealed that while 90% felt their dental school had "an honest interest or concern for diversity on campus" (p. 109) only 20% agreed that their school fostered a "supportive environment for LBGT students" (Anderson, Patterson, Temple, Inglehart, & Habil, 2009, p. 110). They concluded that dental students who had observed fewer incidents of discrimination of sexual minorities by faculty, students, or staff members in their dental school education also reported that they were better prepared to treat non-heterosexual patients. As a result of their findings, they have become strong advocates for infusion of LBGT curriculum content throughout dental school education.

Currently, CODA does not mandate any specific curriculum content or treatment considerations regarding lesbian, gay, bisexual, transgender, or queer patients. It does, however, mention an umbrella non-discrimination clause for all applicants to the dental profession to adhere to the Professional Conduct Policy & Prohibition Against Harassment. This policy states that:

it is ADA policy that all employees are responsible for assuring that the work place is free from improper harassment. The ADA absolutely prohibits sexual harassment and harassment on
the basis of race, color, religion, gender, national origin, age, disability, sexual orientation, status with respect to public assistance, or marital status. Certain discriminatory harassment is prohibited by state and federal laws, which may subject the ADA and/or the individual harasser to liability for any such unlawful conduct. With this policy, the ADA prohibits not only unlawful harassment, but also other unprofessional and discourteous actions. Derogatory racial, ethnic, religious, age, sexual orientation, sexual or other inappropriate remarks, slurs, or jokes will not be tolerated (ADA, 2007, Appendix C, p. 12)

This type of specific guideline, inclusive of verbal derogatory remarks and harassment even for applicants to dental programs, is unusual but indicative of the need for professional programs to keep pace with a society that increasingly acknowledges discrimination against any minority group as unacceptable. Gregorczyk & Bailit (2008) point out that, in order to provide competent dental care in the future, dental schools need to agree on vital components of cultural competence, develop tools to measure adherence to multicultural curriculum content changes, and develop evaluative measures to assess individual dental students’ cultural competency during their educational program and future professional dental practice.
3.7.5 Professional Codes of Ethical Practice

Social workers, physicians, nurses, and dentists all have professional mandates that call for a level of competent practice with every individual, regardless of sexual orientation. These service providers supply direct care to lesbian, gay, bisexual, and transgender clients, and often serve as links to additional community social services. Likewise, these healthcare professionals each operate within their respective fields of practice under established codes of ethics. Professional codes of conduct serve to outline expectations for each of the professions and offer guides to providing individual care to clients/patients. Codes of ethical practice also mandate the advancement of each profession through research that contributes to clinical knowledge and practice (See Appendices III-VI).

Individual adherence to each of the codes of ethical practice is still voluntary, as is any practitioner's individual membership in any overseeing professional organizations (such as the National Association of Social Workers or the American Medical Association). The ethical principles of the professions are not laws, but broad standards of practice regarding patient rights, access to services, and professional duties. The codes of ethics of neither the American Medical Association (AMA, 2008), the American Dental Association (ADA, 2008), nor the American Nurses Association (ANA, 2001) mandate any particular curriculum content, treatment considerations regarding gays and lesbians, sexual diversity, or sexual orientation.
3.8 ATTITUDES ABOUT SEXUAL ORIENTATION

Attitudes are defined as personal opinions or "overall evaluations of people, groups, and objects in our social world. Reporting an attitude involves making a decision concerning liking versus disliking or favoring versus disfavoring an attitude object. Attitudes are important because they affect both the way we perceive the world and how we behave" (Haddock, & Maio, 2007, p.67). Anti-gay attitudes can manifest along a continuum of responses from heterosexism to homophobia and are pervasive in many aspects of our society (Yang, 1997). Heterosexism manifests as the assumption of heterosexual behavior as the social norm and was defined by Morin (1977) as "a belief system that values heterosexuality as superior to and/or more 'natural' than homosexuality" (p. 629). Herek (1990) further defined heterosexism as a cultural assumption and "ideological system (...) which (...) denies, denigrates, and stigmatizes any non-heterosexual form of behavior, identity, relationship, or community" (pp. 316-7). Since homosexuality did not conform to majority views on what constituted appropriate sexual behavior by the general population (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953; Schneider & Lewis, 1984), Herek (1990) posits that negative attitudes regarding homosexuality were institutionalized within our court system, religious doctrines, and social institutions throughout our country.

Studies about attitudes of college students toward sexual minorities are only one aspect to consider in measuring campus climate about sexual diversity issues. Assumptions can be made that rural communities are more intolerant than urban communities. Yet, a study that compared rural and urban university students found that hostile campus climates contributed to tacit acceptance of anti-homosexual beliefs, comments, and behaviors and were correlated to increased incidents of violence against sexual minorities, regardless of location (Waldo, Hesson-
McInnis, & D’Augelli, 1998). Hinrichs & Rosenberg (2002), in a study of 692 heterosexual liberal arts students from six different colleges, found that positive attitudes about gay, lesbian, and bisexual people were linked to several key variables. These variables included being female, having more liberal attitudes about sex roles, lower scores for religious attendance and religious beliefs, attending a college without Greek fraternity or sorority social organizations, and having had positive personal contacts with sexual minorities.

In all professions, student attitudes can differ from those of healthcare professionals, but it is particularly disturbing when there are reports of anti-homosexual attitudes or homophobia within the social work profession. In 1986, a small study surveyed 77 professional social workers and found preliminary support to concerns about bias within the social work profession. Of the social workers surveyed, 31% of the respondents reported negative or homophobic attitudes and concerns about working with gays and lesbians (Wisniewski & Toomey, 1987). A larger study by Berkman and Zinberg (1997), found that 11% of their sample of 187 professional social workers surveyed reported negative or homophobic attitudes.

Research across healthcare fields continues to report negative attitudes toward lesbians and gay men in studies with social work students (Cramer, Oles, & Black, 1997; Krieglestein, 2002; Lim & Johnson, 2001, and Mackelprang, Ray, & Hernandez-Peck, 1996), in medical students (Kelly, St. Lawrence, Smith, Hood, & Cook, 1987; and McGrory, McDowell, & Muskin, 1990), and in nursing students (Anderson, 1981; Cole, 1996; McKelvey, Webb, Baldassar, Robinson, & Riley, 1999; Rondahl, Innala, & Carlsson, 2003). Published research about dental students regarding sexual orientation has been limited to reporting attitudes regarding those infected with HIV (Erasmus, Luiters, & Brijlal, 2005; Hartshorne, Castens, Engelbrecht, & Hattingh, 1994; Oliveira, Narendran, & Falcao, 2002; Synder, 1993).
To date no research has been done that explores across the healthcare professions, student attitudes toward sexual orientation, or how these attitudes may contribute to existing healthcare disparities based on sexual orientation.

### 3.8.1 Social Work Student Attitudes

Several social work researchers (Ben-Ari, 1998; Berkman & Zinberg, 1997; Wisniewski & Toomey, 1987) have expressed concerns for professional ethical practice since individual prejudices and homophobia in the social work field occur within the context of society's homophobic intolerance. Denman (1993) points out that much of our efforts to understand the role of homophobia in social work has been due to a professional mandate for compassion (especially during the early days of the AIDS crisis) without much critical thought as to what assumptions were being made about individuals, or what factors influenced or supported prejudice against homosexuality.

In a review of the published literature, Ben-Ari (1998) found that while the profession was writing about the theoretical acceptance of homosexuality, there was little to no work being done to address curriculum content about sexual orientation or efforts to gather empirical evidence within social work that would indicate a positive change in student attitudes. In an effort to bridge the skills gap between the Social Work Code of Ethics and professional development on an individual's personal beliefs about homosexuality, Ben-Ari compared pre and post test results between two groups of social work students on attitudes towards lesbians and gay men. One group took standard course requirements and electives, while the experimental group in addition to required courses, elected to take a course on homosexuality. Those students who took the elective course on homosexuality, scored higher than their social work peers in post
tests scores on attitudes towards lesbians and gay men. Ben-Ari concluded that academic content that fostered increased awareness of discrimination against gays and lesbians, in conjunction with increased personal experiences with individuals who identified as homosexuals supported the most positive change in attitude about homosexuality in social work students.

3.8.2 Medical Student Attitudes

Medical and psychological training historically reinforced homosexuality resulted from mental illness, arrested development, or genetic misprint (Dalley & Crozier, 2000). Aversion techniques, electric shock, hormone injections, castration, and lobotomy have all been employed as treatments with the professed goal to cure individuals of homosexuality by encouraging development of a heterosexual orientation (Miller, 1995).

While some medical education programs have initiated efforts to improve communication skills about sexual health and sexual practices, little has been instituted incorporated to address the macro level issue of attitudes, personal values, and homophobic behaviors during medical training (Dean, et al. 2000). Frank discussions about human sexuality require physicians to use appropriate language, acknowledge and abate patients' anxiety in discussing sexual issues, and to convey sensitivity, discretion, and non-discriminatory attitudes. However verbiage describing lesbian, gay, bisexual and transgender patients as "an alternative lifestyle occurring with some regularity as a variant of human sexuality" (Hon et al., 2005, p. 344.) shows that medical instruction has room to improve in shifting to a less pathological designation for sexual minorities.

Few studies to date directly examine medical student attitudes regarding sexuality, let alone homosexuality. A 2005 survey of 780 Hong Kong Chinese medical students found that
female medical students were more likely to have homosexual friends and were more likely to be accepting than their male colleagues. While the majority of the students in this survey thought that homosexuals were not inhibited in their learning or their working abilities, fully one fourth reported that they believed homosexuality to be due to a psychological disorder that requires mental health therapy (Hon et al., 2005).

Dixon-Woods et al. (2002) reported on the implementation of a required human sexuality course for British medical students, designed to decrease the stigma surrounding homosexual behaviors and to improve student problem solving for patient sexuality problem areas. The course provided a means for self-reflection and examination of student beliefs and value judgments which can have an effect on patient care. Students completed a survey assessing their attitudes about homosexuality and other "deviant" expressions of sexual behaviors both prior to and following the course. After completing the course, students were less anxious, exhibited more appropriate communication skills, and were more confident when discussing human sexuality issues. Ideally, qualities that would enable a future generation of healthcare providers to care appropriately for their gay, lesbian, bisexual, and transgender patients.

3.8.3 Nursing Student Attitudes

In their review of historic data, Richmond & McKenna (1998) found that older research studies reporting on nursing student attitudes about homosexuals employed the term "homophobia," implying fear of homosexuals, when the attitudes described therein would be more correctly labeled as "biased disgust" than "homophobia". Factors contributing to student bias according to this study included nursing texts that ignored or condemned sexual minorities (Jackson, 1995), reinforcement of homophobia, and strict conservative Christian religious affiliated nursing
programs (Schlub & Martsolf, 1999). Also reflected were differences in attitudes and experiences with homosexual patients before and after the AIDS epidemic (Schwanberg, 1996). Richmond & McKenna (1997) point out that when we undertake a historical review of the nursing professional literature we need to be cognizant of the social and cultural forces that influenced the writers at the time. Thus, they suggest that a review of student homophobia in nursing research needs to be re-conceptualized as an evolutionary analysis of the profession that coincides with changes within the professional literature. This concept has similar applications for all the healthcare professions studied in this dissertation and will be examined in more detail in the discussion section.

A recent study of undergraduate nursing students found that while students reported little trepidation or discomfort in working with patients from racial or ethnically diverse cultural backgrounds they reported "emotionally charged negative responses" (p. 161) in responding to questions concerning their experience and comfort level in working with sexual minorities or patients who were HIV positive (Eliason & Raheim, 2000).

This result was further clarified when attitudes toward HIV-infected patients in the general population and homosexual HIV-infected patients were examined in an anonymous study of Swedish nursing students and professionals (Röndahl, Innala, & Carlsson, 2003). Practicing nurses and assistant nurses ($n = 57$) employed in an infectious disease clinic in Sweden were compared to local university level nursing students and secondary education level assistant nursing students ($n = 165$). The study examined their fear of contracting HIV and whether any of the nursing students or professionals would refrain from administering nursing care to HIV-infected patients. Röndahl, Innala, & Carlsson (2003) found that both professional nurses and student nurses reported a low fear of contracting HIV from their patients. They also
reported empathetic attitudes toward HIV-positive persons generally and those identified as homosexual and HIV-positive specifically. However, 36% of the professional nursing group and 26% of the student nursing group reported they would decline to care for patients who were both HIV-positive and homosexual.

Röndahl, Innala, & Carlsson (2003) point out that nursing students who are not upholding their professional mandate to provide equal care when responding to HIV-positive homosexuals contribute to misinformation about contagion risks. However they assert that the greater danger is that such misinformed student nurses with negative attitudes toward homosexuality might be supervised, educated, and trained by seasoned nursing staff with equally negative attitudes and responses.

Most discouraging is that nursing education is especially rigorous in Sweden when compared to the United States. By law in Sweden, a registered nurse must complete a 3-year university level education, and to obtain a nursing assistant degree a 3-year secondary school training program must be completed. In the United States, while the practice standard is an RN, the academic equivalent of an RN is an associate's degree training program and most can be completed in 2 years. Nurses’ aides either complete formal training programs (typically a year and a half at community college programs), or receive on-the-job training, in response to the demand for nursing care for the baby boomer generation. In contrast, bachelors in nursing (BSN) programs are comparable to other undergraduate programs requiring a four-year program.

3.8.4 Dental Student Attitudes

Research about dental students regarding sexual orientation has been limited to studies that have reported dental students' or dental professionals' attitudes toward working with those known to
be infected with HIV. Erasmus, Luiters, & Brijlal (2005) found that dental student willingness to treat known HIV-positive patients was directly related to their own understanding of the disease, the mode of transmission, and oral manifestations. While knowledge about HIV generally increased as students progressed in their education, the amount of accurate information about the disease process influenced a student's attitude and behavior in treating HIV positive patients.

Erasmus, Luiters, & Brijlal (2005) also found that students lacked consistency and compliance with universal precautions if a patient had not clearly identified as HIV-positive. The lack of compliance with universal precautions is of concern regardless of a given patient’s sexual orientation. The concerns could be compounded if dental students are erroneously relying on cultural stereotypes of homosexuals, such as an individual’s appearance or perceived sexual orientation as potential indicators of HIV status. Hartshorne, Castens, Engelbrecht, & Hattingh (1994) noted that even when dental students reported that they had concerns about treating HIV positive patients, their self-reported attitude was that HIV-positive patients should be afforded the same dignity and respect as other patients. It is unclear how much of that is due to professionally expected responses and/or social pressures to conform to stated codes of ethical practice. Additional research is needed with dental students to determine if differences in reported attitudes indicate conformity to gender role expectations and/or if negative attitudes about homosexuality impact the care of lesbian and gay patients.

Other dental studies have specifically reported gender differences in attitudes toward HIV-positive patients. For example, Oliveira, Narendran, & Falcao (2002) observed a gender difference in Brazilian dental students with regard to compliance and education on infection control measures, with female dental students having better knowledge and more positive attitudes than males. McCarthy & Koval (1996) found that dentist attitudes about HIV were
linked to the negative publicity and controversy of a 1991 Florida dentist found responsible for transmitting HIV to six patients. Media coverage of the issue sensationalized the threat of gay men spreading HIV rather than covering the improper dental procedures practiced by one dentist. Although their study involved only practicing professions, perhaps by extension, student attitudes toward homosexuality were negatively affected following such a scandal within the dental profession.

3.9 CONTACT THEORY, PERSONAL EXPERIENCE, AND ATTITUDES ABOUT SEXUAL ORIENTATION

Social Contact Theory, which has its origins in social psychology, is a way of understanding the prejudice and conflict that arise from encounters with diverse individuals. Some early researchers, like Baker (1934), upheld the prevalent belief that contact between races led to "suspicion, fear, resentment, disturbance, and at times open conflict" (p. 120). Other researchers, however, found that increased social contact was the key to decreasing racial and ethnic conflict, serving to foster "mutual understanding and regard" (Lett, 1945, p. 35). The increased necessity to understand differences between social and cultural groups was due in part to military and housing desegregation efforts following World War II and led to additional research in social contact theory. Research on such topics as tracking the desegregation efforts of the U.S. Merchant Marines (Brophy, 1946) and integration of public housing projects (Deutsch & Collins, 1951; Wilner, Walkley, & Cook, 1952) strengthened the notion that increasing contact between differing groups is linked to more positive social interactions. Likewise, Williams' (1947) efforts
to track, empirically, the reduction of prejudice between dissimilar groups following intergroup contact situations were influential to the work of Gordon Allport (1954).

Allport originally directed many of his early efforts toward understanding the racial prejudice, stereotypes, and conflicts that arose between groups who had limited social contact in our society and found that:

Prejudice (...) may be reduced by equal status contact between majority and minority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional supports (i.e., by law, custom or local atmosphere), and provided it is a sort that leads to the perception of common interests and common humanity between members of the two groups. (1954, p. 281).

Allport theorized that these elements of social interactions could be applied to other social groups in order to reduce prejudice, although he later expressed concern that superficial contact between members of differing groups might fail to provide sufficient opportunities for deeper knowledge. He believed that superficial contact might actually serve to reinforce any negative attitudes and stereotypes held about the other group (1979). For as progressive as this sounds in theory, Allport's early writings on prejudice and social contact were themselves reflective of the social views of his time-period. For example, he posited that interracial sexual attraction was apparent from the number of "mixed breeds," commenting that, in our sexually oppressive society, "differences in color and social status seem to be exciting rather than repelling" (p. 374).
In his only reference to homosexuality, in *The Nature of Prejudice*, Allport noted that reformatory school homosexual crushes between "white and Negro adolescent girls" served as a "functional substitute" for heterosexual relations, since "Negros have an open and unashamed way of looking at sex" (Allport, 1954, p. 374). Not only do these statements reflect the lack of awareness and sensitivity to issues of racism or classism so characteristic of the time-period, but Allport's interpretation of these reports of same-sex, bi-racial relationships, served to delay serious consideration of contact theory and sexual orientation issues (Allport, 1954).

Allport originally theorized that four basic components were required in order to reduce prejudice. These were: (a) an assumption of equal status between members of differing groups; (b) the formation of situations in which dissimilar groups might work together toward common goals; (c) the establishment of institutional supports, thereby reinforcing authority for changes in social climate; and, (d) the facilitation of contact, thus fostering an increased perception of similarity between groups and allowing an exchange of knowledge with emotional connection (Kenworthy, Turner, Hewstone, & Voci, 2005).

Contact theory has proven useful in examining the processes individuals use when conflict arises from integrating different social experiences, justifying or judging social behaviors, and defining social issues. Allport's theories about social relationships and the nature of prejudice raise additional questions about what characteristics give rise to disparities between social groups, in areas such as social status, social stigma, and access to social resources including employment, healthcare benefits, and equality in legal proceedings.

These questions have particular relevance in matters of sexual orientation where, unlike in matters of race, the differences might not be readily apparent (Haddock, Zanna, & Esses, 1993). This was termed by Herek and Capitano (1996) as "concealable stigma," (p. 413) noting
that homosexuals who successfully conceal their sexual orientation avoid being identified with a stigmatized social group.

Many studies have reported findings regarding intergroup contact in which social stigmas stem from readily apparent physical differences such as race (Baker, 1934; Brophy, 1946; Irish, 1952; Works, 1961), ethnicity (Amir, 1969; Dijker, 1987), or physical handicap (Gathing, 1991; Harper, 1985).

Current contact theory research address concealable social stigma and can range from investigating intergroup interactions to tracking changes in majority-minority groups’ social contact patterns. These studies have investigated social contact theory as it applies to socially stigmatized groups whose differences are not readily apparent. For example social connections can affect whether an individual self-identifies as HIV-positive (Schiff, McKay, Bell, Baptiste, Madison, & Paikoff, 2003; Serovich, 2001), or is the recipient of biased attitudes among different religious groups (Craig, Carns, Hewstone, & Voci, 2002). Additional studies have addressed the measurement of stigma and the dynamics of intergroup bias (Eller, 2003; Pettigrew & Tropp, 2006; Tropp, 2006), and individuals’ reactions to mental health issues (Blair, Park, & Bachelor, 2003; Link & Cullen, 1986). Such research calls into question whether equal-status contact is always necessary between antagonistic groups in order to lower tension and lessen negative prejudice.

Because homosexuality is a concealable stigma, a homosexual individual might be assumed to have a status equal to that of a heterosexual until that individual reveals his or her sexual orientation. Herek and Capitano (1996) investigated why individuals might choose to conceal their homosexuality, even within an intergroup interaction (meaning among other homosexuals). They found that successful “passing” (as heterosexual) during any social
interaction means that individuals can then choose when or whether to "selectively disclose their stigmatized status to majority member groups" (p. 412). They also found that sexual minorities are most likely to make such disclosures when a "majority member group has already formed positive feelings toward the stigmatized person" (p. 412). This was consistent with previous research that people who reported increased social contact with a gay person tended to report more favorable attitudes toward gay people (Gentry, 1987; Herek, 1988; Herek & Glunt, 1993; Schneider & Lewis, 1984).

Another thing to consider is that the sexual minority community itself is comprised of unique individuals and subgroups. Golebiowska (2000) theorized that an individual's underlying belief system regarding causality and locus of control greatly influences social constructs like stigma, prejudice, judgment, intolerance, or stereotypes. These belief systems, even within stigmatized groups influenced whether or not an individual would choose to have contact with other individuals or groups. This might help to explain why, within groups, some people feel justified in engaging in socially harmful behaviors, even when they share social stigma, (such as homosexual individuals who engage in unsafe sexual practices). Some researchers (Bingman, Marks, & Crepaz, 2001; Clement & Schonnesson, 1998) have found individuals psychologically cope with and adapt to a major medical change (such as being told they are HIV-positive) differently if they regard their infection as deliberate or unintentional on the part of a previous sexual partner. This is regardless of whether they share status as members of the same stigmatized group. Such findings have implications for public health programs in HIV education and harm-reduction methods, such as targeted outreach programs for men who have sex with men but do not identify themselves as "gay." The research of Kenworthy and Miller (2002)
found that conflict between social expectations for in-group and out-of-group norms greatly influenced an individual's subsequent behaviors.

The status and history of sexual minorities in the United States as a stigmatized social group is well documented in both research studies and social histories (Bérubé, 1990; D'Emilio, 1983; Duberman, Vicinus, & Chauncy, 1989; Herek, 1991, 1992b). Equal status and respect for those with sexual orientations that differ from heterosexuality, has yet to be fully achieved in our society. The term "sexual orientation" itself is socially constructed and, although originally meant to convey a continuum of orientations, is often reduced by society to identify gay, lesbian, bisexual, transgender, or queer individuals (D'Emilio, 1983).

Terminology choice to discuss sexual orientation has reinforced and exacerbated stigmatization and often reflects implicit policies which ignore or minimize the gay community. For example, articles printed in the New York Times prior to the 1980's about homosexuality "emphasized the stance of vice squad officers and the segment of the medical community that categorized homosexuals as 'crippled psychically' (...) so throughout the 70's and into the '80's, most gay men and lesbians who worked at the Times were deeply closeted" (Signorile, 1992, p. 32). The term "gay" was the self-descriptive of choice adopted by the gay rights movement as part of the process to reject the negative associations with the terminology of homosexuality in parallel to the choice of the civil rights movement's preferred terminology of black rather than colored or negro. (Sikov, 1986). However, until 1986, the terminology preferred by the New York Times was homosexual, as part of the policy at the Times not to report or acknowledge the social changes from the gay rights movement. The "Times editorial policy was to forbid its writers to use gay unless the word was included within a quotation(…) since gay had not heretofore been sufficiently accepted into the English language" (Sikov, 1986). By 1991, under a
new editor and publisher, *The New York Times* "sharply reversed the implicit policies of the past" and committed to diversity not only in covering topics and events within the gay community but in hiring openly gay staff and journalists (Diamond, 1993).

The gay rights movement’s initial focus was on encouraging individual gay men and lesbians to *come out* in order to provide "more individuated and personalized" view of the gay community (Herek & Glunt, 1993, p. 239). In a study which analyzed data from a national AIDS telephone survey of 937 respondents, interpersonal contact more than any other demographic or social psychological variable considered in the study was found to be the strongest predictor of positive attitudes toward gay men. Herek and Glunt (1993) also found that those more likely to have had gay friends and relatives disclose their sexual orientation or *come out* tended to be highly educated, politically liberal, young, and female respondents.

Coming out provided heterosexuals with increased social contact with a known member of the gay community, and is still an effective means to reduce stigma about sexual minorities. Lewis (2006) summarized 27 national surveys conducted since 1983, and concluded that individual contact with gays and lesbians was a significant factor linked to whether individuals were more likely to favor nondiscrimination policies and laws protecting sexual minorities. Overby and Barth (2002) found that as individual gays and lesbians came out in their home communities, attitudes toward sexual minorities improved overall for their community.

Students entering professional healthcare programs bring with them their personal experiences with gays and lesbians. Social contact might include a range of experiences including media sources (such as television, newspapers, and movies (Levina, Waldo, & Fitzgerald, 2000) or direct contact (such as a co-worker, volunteer, or personal friendship with a gay or lesbian person). Students' personal experiences, previous social contact and interactions
with lesbian, gay, bisexual, and/or transgender individuals might be reflected in their attitudes toward homosexuality. Altemeyer (2001) found that changes in attitudes as measured on attribution scales toward homosexuality were most significantly linked to increased personal contact with openly lesbian and gay individuals.

Robinson & Ferfolja (2002) point out that, with such a varied environment of personal experience, it can be difficult for any instructor to foster discussions on heterosexism and homophobia in a classroom setting. Anti-homosexual attitudes expressed by a student in a classroom setting could result from a combination of individual experiences, family attitudes and expectations, as well as influences from his or her community’s values. Robinson & Ferfolja recommend that all teachers be trained to address homophobic and heterosexist behavior in the classroom.

As members of our society, individual healthcare providers can hold either positive or negative attitudes about non-heterosexual orientation as the result of combinations of personal experiences with family and friends, as well as community or religious influences. Spinks, Andrews, & Boyle (2000) point out that providing quality healthcare for patients also means providing quality healthcare to sexual minorities. The AIDS crisis forced professionals who might have preferred to ignore or minimize the issue of homosexuality, especially if in conflict with their own moral, religious, or personal views, to question their cultural attitudes about sexual orientation.
For purposes of this discussion, religion is defined as institutionalized beliefs, rituals, and practices (Stander, et al., 1994; Prest & Keller, 1993); frequency of spiritual practice is defined as the regularity with which an individual participates in religious practice. Spirituality is defined as individuals’ personal ways of interpreting their life experiences through the framework of their belief systems (Stander, et al., 1994; Miller & Thoreson, 2003). A superficial examination of self-reported religious affiliation without discussion of frequency of spiritual practice does not accurately describe the differences that exist within faith communities and may contribute to inaccurate assumptions about group prejudices and biases about non-heterosexual orientation. A full exploration of spirituality, religion, and frequency of spiritual practice is outside of the scope of this study. However, the impact of frequency of spiritual practice on attitudes toward non-heterosexual orientation will be examined. The demographic breakdown of self-reported religious affiliation within the sample will also be reported.

The latest results from the American Religious Identification Survey (ARIS) reported on 228,182,000 total respondents who were willing to self-identify their religion by telephone surveys conducted within the continental United States. Of these respondents, 173,402,000 identified as Christian (which included anyone who responded as Catholic, Baptist, Protestant, Methodist/Wesleyan, Lutheran, Christian-no denomination, Presbyterian, Pentecostal/Charismatic, Episcopalian/Anglican, Mormon/Latter Day Saints, Churches of Christ, Jehovah's Witness, Seventh-Day Adventist, Assemblies of God, Holiness/Holy, Congregational/United Church of Christ, Church of the Nazarene, Church of God, Orthodox/Eastern, Evangelical/Born Again, Mennonite, Christian Science, Church of the...
Brethren, Non-denominational, Disciples of Christ, Reformed/Dutch Reform, Apostolic/New Apostolic, Quaker, Christian Reform, and Foursquare Gospel). Another 8,796,000 respondents self identified as having "other" religions (inclusive of Jewish, Muslim, Buddhist, Unitarian/Universalist, Hindu, Native American, Wiccan, Pagan, Spiritualist, or unclassified). There were 34,169,000 respondents who identified as atheist, agnostic, or specified they had no religion. Finally, 11,815,000 respondents refused to answer telephone inquiries about their religious identification (U.S. Census, 2008).

Several researchers have noted that there are differences in how individuals experience religion and spirituality, and that those differences are especially marked in sexual minorities (Bockting & Cesaretti, 2001; Buchanan, Dzelme, Harris, & Heckler, 2001; Miller & Thoreson, 2003; Rodriguez & Ouellette, 2000; Sutton, McLeland, Weaks, Cogswell, & Miphouvieng, 2007). An individual’s identification with a particular religion can take a variety of forms and vary widely in practice, and may not reflect how or whether an individual feels fulfilled spiritually.

Identification with a religious group can exert a great deal of influence over an individual’s attitudes and can reinforce expected social conformity (Worth, Allison, & Messick, 1987). Religious groups’ doctrines about non-heterosexual orientation can vary widely, as can the interpretation and implementation of those doctrines. Gays and lesbians within some religious communities are faced with an impossible choice: they can choose either fully to accept and acknowledge their sexual orientation, potentially risking both their families’ or religious communities’ support if they reject the practices and teachings of a faith that condemns homosexuality (Brooke, 1993; Buchanan, Dzelme, Harris, & Heckler, 2001,), or they can choose to renounce same-sex behaviors, either living celibate lives or engaging only in heterosexual
behavior in order fully to be accepted by and participate in the lives of their families and faith communities (Brooke, 1993; Buchanan, Dzelme, Harris, & Heckler, 2001; Malloy, 1981; Wagner, Serafini, Rabkin, Remien, & Williams, 1994).

The coming out process is often complicated by one's own developmental understanding of his/her own sexuality (Phillips, 2003; Sullivan, 2005) and fear of rejection by friends, family, and religious communities, as well as depression and guilt (Favier, O'Brien, & Ingersoll, 2000; Herek, 1987b). For some LBGT individuals, reconciling their religious beliefs and their sexual orientation can present formidable challenges (Coyle & Rafalin, 2000; Davidson, 2000; Goodwill, 2000; Wagner, Serafini, Rabkin, Remien, & Williams, 1994). The coming out process can be further complicated for those who are negotiating non-heterosexual identity in the context of multiple layers of identity as “other”, such as trying to navigate as a member of a stigmatized ethnicity, religion, or race. Research has been conducted in this area addressing groups such as African Americans (Griffin, 2000; Sneed, 2008; Lemelle, 2004), Muslims in a post-9/11 world (Minwalla, Simon Rosser, Feldman & Varga, 2005; Naylor & Ryan, 2002), Native Americans (Adams & Phillips, 2006; Hill, 2007), and Jewish (Magid, 2004; Shokid, 2001) including specific research on Conservative (Schnoor, 2006) and Orthodox (Mark, 2008) Judaism.

In a recent survey of 66 lesbian, gay, and bisexual respondents 2/3 reported that they had experienced difficulty in reconciling their religious identities with their sexual orientation. The result of this conflict with religious values caused some individuals to delay coming to terms with their sexual orientation but, perhaps surprisingly, contributed to their recognizing and contemplating their sexuality much earlier than they might have otherwise (Schuck & Liddle (2001). Those individuals who reported negative conflicted experiences and also an accelerated
process of addressing their non-heterosexual orientation were also much more likely than other respondents to leave their religious communities.

One way that sexual minorities cope with these conflicts between their religious beliefs or community expectations is to conceal their sexual orientation or sexual behaviors from the larger religious community. The desire to avoid social stigma, negative judgment, or overt discrimination, in order to “pass” as accepted members of a dominant or majority group (Allport, 1954/1979) can be the root cause of their efforts to conceal their sexual orientation. Individuals within religious groups may also selectively choose to reveal their sexual orientation to individual members of larger groups whom they perceive to be more supportive of non-heterosexual orientation. Individual disclosure has been found to reduce prejudice within larger groups, thus reducing the need to conceal one's orientation and making possible the recognition and differentiation of that individual in a way that separates him/her from association with the stigmatized group (Herek & Capitanio, 1996; Aguero, Block, & Byre, 1984).

Some studies have reported correlations between expressed religious prejudices and negative attitudes toward homosexuals (Laythe, Finkel, & Kirkpatrick, 2001; Laythe, Finkel, Bringle, et al., 2002). For some whose religious teachings support the intrinsic value of all people, use of the terminology "love the sinner but hate the sin" is reflective of their efforts to distinguish between condemnation of homosexual behavior rather than of homosexual people (Bassett et al., 2001; Batson, Floyd, Meyer, & Winner, 1999). Yet McLeland & Sutton (2008) note that even use of the term homosexual reflects outmoded categorical assumptions about sexual orientation. They acknowledge that terminology has shifted in response to increased awareness and reduced social stigma, and caution professionals to be conscious of word choices when reporting on sexual orientation and religious differences.
In a study conducted at a Christian liberal arts college, Bassett et al. (2000) found significant differences in attitudes about sexual orientation and sexual practices among their sample of Christian respondents (whether currently celibate or sexually active). Those respondents whom they termed as "universally accepting" showed no statistical difference in support for non-heterosexual orientation regardless of reported sexual activity. Among other respondents whom they termed as "selectively accepting", support for sexual minorities was high in response to questions about celibate homosexuals but dropped when questioned about sexually active homosexuals. Lastly, respondents whom they termed "universally intolerant" of gay men and lesbians were found to reject sexual minorities as individuals regardless of sexual behavior.

A critical finding of this study is that those respondents whose scores indicated a conscious desire to control their own stereotypes and prejudices toward sexual minorities were highly correlated with scores of greater tolerance regardless of sexual activity (Bassett et al., 2000).

In practice, personal identification with a particular religion carries with it a myriad of layers, often reflective of one’s family history, social expectations, political changes, or survival strategies. For those who have strong family ties to religious practices, family reactions to disclosure of non-heterosexual orientation can cause a crisis if no one in their faith communities can be relied upon for support (Stronmmmen, 1989). Families can face ostracism from their faith community if they support their gay family member. Some faith communities see the change in social acceptance towards gays and lesbians living their lives openly in society as a sign that the Devil is at work in our society (Herman, 2000). In one of the few studies that surveyed religious family members of known lesbian, gay, or bisexual individuals, Lease & Shulman (2003) found that an unshakable belief in God's unconditional love allowed religious families to reconcile conflicts between their religious teachings and the non-heterosexual orientation of a family.
member. Particularly helpful to religious families are referrals to educational and support groups such as Parents, Families, and Friends of Lesbians and Gays (PFLAG) to link with LBGT-affirming congregations and provide social support during their own processes in coming to terms with loving gay family members. Ironically, Fredrikson (1999) noted that often these same lesbian and gay children who were ostracized by biological family members for their sexual orientation, later return to the family unit to assume responsibilities as caregivers for their aging parents.

While previous research studies have reported high correlations between religious affiliation and negative attitudes about sexual orientation (Ellis, Kitzinger, & Wilkinson, 2002; Herek, 1987b; Lottes & Kuriloff, 1994; Schuck & Liddle, 2001) there are often significant differences between religious denominations which might help to account for reports of variation in attitudes. For instance, Newman, Dannenfeld, & Benshek (2002), in a sample of 2837 social work and counseling students, found that only a small minority (6.5%) reported intolerant attitudes toward lesbians and gay men, with those who identified as conservative Protestant being more likely than all other religious categories reported by respondents to report negative attitudes. Those students identifying as moderate Protestant, Catholic, liberal Protestant, Buddhist or Hindu were reported as holding more tolerant attitudes about lesbians and gay men. Those students identified as holding the most positive attitudes about lesbians and gay men identified as Jewish or not religious. Similar findings were reported by Lottes & Kuriloff (1992) with liberal Jewish respondents having the most tolerant attitudes toward homosexuality in their sample when compared to Catholic and Protestant respondents. Curiously, although 17% of their sample identified as “other” or “no religion,” there was no effort to ascertain their attitudes. Also,
attitudes toward homosexuality were not reported if respondents identified as Muslim due to the statistically small subset (1%) within the sample.

To some religious groups aligned with more fundamentalist beliefs and conservative religious teachings, homosexuality is simply a sin and morally wrong. Religious fundamentalism is grounded in the belief that "there is one set of religious teachings that clearly contains the fundamental, basic, intrinsic, essential, inerrant truth about humanity and deity" (Altemeyer & Hunberger, 1992, p. 118) and holds that people who choose to live morally righteous lives will adhere to strict codes of social conduct, personal values, and a fundamental understanding that individuals must live in accordance with divine rules. The majority of fundamentalist religions, by their nature, reject tolerance for people, religious beliefs, or social values that differ from their own teachings; for those groups, persons who do not adhere to their specific beliefs are considered morally inferior (Friedman & Downey, 1994).

The effects of frequency of spiritual practice have been found to differ significantly by denomination. Miller and Thoreson (2003) argue that many studies reduce frequency of spiritual practice to an artificial measure of attendance at a place of worship rather than trying to take into account various religious practices that may indicate adherence to religious teachings. Such practices could include private prayer, tithing, or charity work.

Several studies have previously linked frequency of spiritual practice and participation in conservative ideologies with more negative attitudes toward homosexuality (Cameron & Ross, 1981; Hansen, 1982; Herek, 1988; Larsen, Cate, & Reed, 1983; Larsen, Reed, & Hoffman, 1980). For example, Hinrichs & Rosenberg (2002) found significant bias and prejudicial attitudes against non-heterosexual orientation in individual and group analysis of Christians attending conservative American Protestants churches when responding to case scenarios. While
overall group attitudes about non-heterosexual orientation was negative, it is curious that individual group members tended to have more favorable opinions about sexual minorities if there was a mental health variable (depression) mentioned in the case scenario. McLeland & Sutton, (2008) posit that some members of more conservative congregations might feel more comfortable in rationalizing same-sex attraction and behaviors being linked to (inaccurate assumptions about) impaired mental health, or biological components.

The importance of finding a gay-supportive faith community has been stressed not only as providing a safe haven of social support for lesbian and gay individuals (Tan, 2005), but also as a means of strengthening communities. Hinrichs & Rosenberg (2002) found that membership in and frequency of attendance at more liberal Protestant denominations was predictive of more positive acceptance of gay, lesbian, and bisexual persons and those congregations where sexual orientation was discussed in more positive terms encouraged non-heterosexual members of the congregation to participate fully in the community.

A recent study combining both qualitative and quantitative methods found that the majority of respondents to their survey of 40 participants within the Metropolitan Community Church (MCC) in midtown Manhattan in New York City reported that their identification within a gay-supportive community and frequency of involvement with MCC spiritual services were the most significant factors in resolving any conflicts between their previously held religious beliefs and attitudes toward non-heterosexual orientation (Rodriguez & Ouellette, 2000). Respondents also noted that long-term involvement with the MCC spiritual community had served to counteract the effects of earlier negative experiences in religious congregations. These findings reflect both the changes and need for additional changes in how frequency of spiritual practice is perceived not only within the larger society but also recorded within the professional literature.
Leaders of political parties play an important role in interpreting and conveying information that can shape their constituents’ ideology, galvanize party activists, and energize voters. In addressing the civic discourse that is inherent in a multicultural democracy, political philosopher Stephen Macedo stated “At its best, talk of diversity (…) reminds us of the extent to which the promise of freedom and equality for all remains a work in progress: only partially realized, only partially understood” (2000, p.3).

The two primary political parties in the United States, Democratic and Republican, represent differing ideological positions about the proper role of government within society as well as perspectives about privacy, moral conduct of citizens, and individual rights and responsibilities (Knoke, 1974). As the United States has become increasingly multicultural, political rhetoric between the Democratic and Republican parties has become more polarized. Opinions held by individuals have been found to be influenced by the rhetoric of their political party affiliation (Schlesinger, 1985). However, just as political ideas or taglines can trickle down to influence citizens, the public can likewise exert pressure on their elected officials to respond to changes in socio-cultural attitudes (Bartels 2000; Layman 1999). Gradual shifts in social, cultural, demographic, or ideological positions have been defined as "issue evolution" (Lindaman & Haider-Markel, 2002, p.91). Shifts in public opinion have been instrumental in many political and legislative initiatives on issues as diverse as child labor, women's suffrage, civil rights, and disability rights.

To determine whether gay rights had reached a tipping point in public acceptance, Lindaman and Haider-Markel examined data from 1970 to 1999 from congressional voting
patterns and responses to the General Social Survey for indications of spreading support for gay civil rights in the United States. They found political party leadership had become increasingly partisan and polarized on gay issues over the past 30 years, with Democratic leaders increasingly supportive or pro-gay and Republicans either holding steady or limiting gay civil rights legislation. However, analysis of the general public from data obtained by the General Social Survey, indicated an "escalating trend in pro-gay support" that was significantly less partisan, with Democrats "pro-gay support from 42 to 69 percent and Republicans from 36 to 59 percent" (Lindaman & Haider-Markel, 2002, p.99). Realistically then, how an individual identifies on the political spectrum may not always indicate his/her own personal attitudes about sexual orientation or views about human rights and civil liberties issues for sexual minorities.

Lindaman and Haider-Markel caution that this trend in support has yet to reach the critical point of "issue evolution" which would indicate a long-lasting cultural shift in America toward support for lesbian and gay human rights. If political party leaders continue to support polarized extremes rather than representing values of mainstream voters, the natural consequence might be redistribution of core party coalition groups (Layman 1999), which could ultimately weaken both the Republican and Democratic parties to the extent that a viable third party could attract disenfranchised voters (Carmines, McIver, & Stimson,1987; DiMaggio, Evans, & Bryson, 1996).

Whether one has a social conservative or liberal view regarding homosexuality depends on many issues, including one's religion’s teachings, religious practices and beliefs, one's moral views, or assumptions about what causes of same-sex attraction and behaviors. The impact of religion and frequency of spiritual practice on attitudes toward non-heterosexual orientation has
been examined earlier in this document. The sections that follow will explore the links between morality and etiology of sexual orientation and their impact on political identification.

The concept that individuals undergo different stages of moral development as proposed by Piaget (1932, 1997) was expanded with Kohlberg's work (1981; Kohlberg, Levine, & Hewer, 1983; Kohlberg & Lickona, 1976; Colby & Kohlberg, 1987), which posits that an individual's understanding of social norms for moral behavior, judgments, and even philosophical understanding of morality could continue to develop throughout his/her lifetime. This view has been the dominant paradigm in research on morality and moral reasoning. An individual’s acceptance of what is deemed to be appropriate moral behavior is linked to social context and expected social norms. Moral concepts of what is just and legal in society can shift over time: for example, slavery was once seen as just. This has resulted in long-term consequences; racial issues continue to affect our society despite the fact that social context, social norms, and laws have changed. Schuman, Steeh, & Bobo (1985), in a study of attitudes and social trends in the United States, found that while people may indicate support when queried on general principles of racial equality, many individuals still failed to support specific issues (for example, interracial marriage) if it conflicted with their personal values or belief systems. One reason Schuman, Steeh, & Bobo suggest for this discrepancy may be those individuals’ awareness of the socially-desired response or the “politically correct” answer.

Political correctness has been defined as the "self-imposed ideological conformity and censorship practiced by intellectual, business, and governmental elites in the United States" (Van Den Berghe, p. 2139). Socially-desired responses occur when respondents understand that their current social context supports particular statements and that there could be social, professional, or political sanctions against expressed non-conformist viewpoints or responses (Matchinsky &
Iverson, 1996). One way to reduce the effect of socially-desirable responses when inquiring about controversial issues is to frame questions that ask directly about individual opinions on specific issues rather than asking questions about broader social issues like "human rights" (Howard-Hassmann, 2001).

Moral differences over controversial social issues such as same-sex marriage often reveal discrepancies between personal viewpoints and socially-desired answers. Laws that address marriage reflect prevailing social views and moral values about the function of marriage within society as well as legal rights and economic responsibilities. Marriage is one way for individuals not bound by blood ties to be legally recognized as family (Oswald, 2002). Increasingly, cohabitation, divorce, remarriage(s), and blended families influence our understanding of marriage and subsequently of who should be legally and morally recognized as family. The current debates over the issue of same-sex marriage in the United States demonstrate how personal moral disagreements about non-heterosexual orientation can have significant political ramifications for sexual minorities.

Moral disagreements over sexual orientation can be closely tied to religious beliefs. If an individual believes that being gay, lesbian, bisexual, or transgender is morally wrong, then efforts to increase awareness about non-heterosexual orientation, such as school-based educational programs (MacGillivray, 2004) or efforts by community groups to increase visibility (e.g., pride parades) can be seen as a threat to not only his/her own beliefs and value system but to the moral integrity of his/her entire community (Button, Rienzo, & Wald, 1997).

Social conservatives often lead resistance to proposals that would include sexual orientation in non-discrimination clauses that cover sex, age, race, and religion in local ordinances, state laws, or Federal public policies (People for the American Way, n.d., 1997;
Swan, 1997) because they see such laws as attacks on their traditional moral beliefs that could lead to "legitimization and promotion of homosexuality as normal and natural" (MacGillivray, 2008). Those who support opposition to non-discrimination argue that they are unfairly labeled as intolerant since the "message sent by such laws — their 'social meaning' — is that the religious believer who disapproves of homosexuality is just as bigoted as a racist (whose actions are also prohibited by similar legislation)" (Hills, 1997, p. 1588).

Within a pluralist democratic society, political liberals acknowledge individual citizens can come from a variety of religious, philosophical, or moral backgrounds. In order to be able to be responsive to all citizens within a country, social institutions need to be neutral toward any one particular ideology or theological doctrine. Discrimination, whether perpetrated by an individual citizen or institutionalized by traditional historical practices, can continue at many levels within pluralist democratic societies even when social values or laws have changed to make such practices illegal (Wright, 2006). Thus, political liberals see efforts to decrease social stigma, improve educational programs about LBGT issues, or to seek legal and political solutions to historical social inequality as part of the process of institutional change necessary to the promotion of social justice (Rawls, 1993). Liberals tend to be wary of religious limitations on civil liberties and view religion and religious practices as a personal choice. Since the emphasis is on individuality in a pluralist society, there should not be, liberals would argue, an expected adherence to a "well-defined consensus morally or politically" (Schaff, 2004, p. 133).

While there is still moral disagreement about same-sex relations generally, public opinion polls show a majority of Americans are disposed toward tolerance. There are degrees as to how much and under what circumstances they think same-sex
relations are to be recognized. Conservatives generally believe that any social recognition is a slippery slope that will inevitably lead to the destruction of the family and social fabric. Liberals typically encourage tolerance of sexual minorities despite predominant religious sentiments that condemn homosexuality as “immoral” (Schaff, 2004, p. 133).

Research across many professional disciplines has attempted to explain whether sexual orientation is determined by differences that are due to natural (genetic or biological issues) or nurturing (family or social) factors. This type of research differs markedly from previously accepted theories, publications, and studies that viewed homosexuality as the result of moral defect or psychosocial maladjustment and sought to uncover issues within family units, or socializing factors that would result in homosexuality. While exploration of the etiology of homosexuality is outside of the scope of this study, social and political climates greatly influence what types of studies are crafted, funded, and published, and the changes in society are evident in the progression from studies focusing on how we might address the “moral defect” to those that do not attach stigma but rather investigate biological and nurturing causality in the absence of judgmental premises.

Beliefs about what causes differences in sexual orientation influence not only individual attitudes, but can greatly affect public awareness and shape social policies about sexual orientation. Button, Rienzo and Wald (1997) note that "one of the most important factors influencing attitudes about civil rights protections is beliefs about the origin of sexual orientation," (p. 61). Survey respondents who believed that sexual orientation was biologically-based rather than a lifestyle choice were more likely to support the idea of openly lesbian and
gay individuals serving in the military and to support inclusion in anti-discrimination laws (Oldham & Kasser, 1999; Wilcox & Wolpert, 2000). Some anecdotal reports indicate that the general public and elected officials are more supportive of changes to state laws if biological factors are thought to contribute to homosexuality (Goldberg, 2000; Halley, 1994).

If homosexuality is determined to have a biological cause, then, like being born with blue eyes or brown skin, it would be outside of a person's ability to change or control (Rahman & Wilson, 2003). Parents of gay men or lesbians may take comfort in thinking that their children are homosexual because of biological factors rather than "pathology or their home environment" (Rist, 1992, 73).

If society ultimately accepts that there is a biological basis for sexual orientation that cannot be controlled, it will become increasingly difficult to justify discriminatory institutional practices such as prohibiting homosexuals to marry or serve openly in the military. Mucciaroni & Killian (2004) posit that, as a social policy position, this shift within the scientific community to research and report findings that support clear biological immutability for sexual orientation would have political advantages for liberals and "gay rights supporters" (p. 53). Biological immutability would be a political blow to social conservative positions that homosexuality is caused by immoral values or unnatural lifestyle choices resulting from behaviors that need to be controlled and that it is possible to make a conscious choice to change to a heterosexual orientation (Bamforth, 1997; Lakoff, 1996). A definitive understanding of what causes either homosexual or heterosexual orientation has yet to be determined. However, individual beliefs about the morality and etiology of sexual orientation in the United States reinforce widely disparate views and undergird many social and political efforts that affect sexual minorities. Political power within a society is often maintained limiting efforts of marginalized groups to
question social norms or challenge traditional practices (MacGillivray, 2008). Recent legislative changes in many countries around the world suggest that our social views and political responses to sexual orientation are changing.

3.12 PERSECUTION, PROSECUTION AND PATHOLOGIZING OF SEXUAL MINORITIES IN THE UNITED STATES

Historically, gays and lesbians had reason to fear legal prosecution under sodomy laws that criminalized (specifically) oral or anal sexual contact. From the founding of the Puritan colonies sodomy was a criminal offense. Successful prosecution typically resulted in the convicted party serving time in prison or public stocks, or banishment from the colony (History Project, 1999). With the formation of the United States, each state adopted its own version of sodomy laws, with some states specifying only sexual behaviors (such as oral sex), meaning that heterosexuals engaging in those sexual behaviors risked prosecution under sodomy laws. In other states, sodomy laws specifically addressed only same-sex partner sexual contact. For example, Texas law specified that oral or anal sexual behavior was legal between opposite sex partners, but illegal if the parties were of the same-sex (Lambda Legal Defense Fund, 1999).

Selective enforcement of sodomy laws by officials was a socially accepted method of harassment of gays and lesbians in the United States. The 1969 Stonewall Riots are often noted as a watershed moment, marking an increase in visibility and organization of the gay rights movement in the United States. At the Stonewall Bar in New York City, patrons had gathered to mourn the death of Judy Garland, who was one of the first celebrities to publically support gay
rights (Rutledge, 1992; Weiss & Schiller, 1988), and were in no mood to tolerate routine harassment of *sodomites* by the police. The patrons’ anger and resistance to police sparked the Stonewall Riot widely considered to be the beginning of the gay rights movement in the United States (Duberman, Vicinus, & Chauncy, 1989; Rutledge, 1992). Sodomy laws continued to be selectively enforced until the 2003 U.S. Supreme Court's landmark ruling in *Lawrence v. Texas* that granted same-sex couples the same right to privacy in consensual sex as heterosexuals. One of the effects of the *Lawrence v. Texas* decision was that as a Supreme Court decision, it overturned all remaining statewide sodomy laws (Lambda Legal Defense Fund, 2008).

Negative attitudes about homosexuality were part of the social context of this time period. Socially, gays and lesbians risked arrest if they were discovered even in the vicinity of a gay bar, and printing of names of those arrested under sodomy laws in the public newspapers. A diagnosis of homosexuality at the time often meant involuntary commitment to institutions. Medical "treatments" for homosexuality included electro shock therapy in aversion techniques, hormone injections, castration, and lobotomy (Miller, 1995).

The medical establishment and the American Psychological Association served historically to legitimize social discrimination against lesbians and gays. The medical establishment held that homosexuality was a disease or unnatural state that required treatment. Historically, the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) nomenclature and diagnostic categories as created by the American Psychiatric Association (APA) have influenced and been used extensively in social work practice (Berkman & Zinberg, 1997). The APA formally voted to remove designation of psychopathology to homosexuality in 1973. The fact that this vote was even considered by the APA membership was in large part due to a speech delivered at the previous year's APA gathering and to the personal courage of a man later identified as Dr. John E.
Freyer (Kirby, 2003). So deeply embedded was the stigma and negative attitudes about homosexuality at the time, Dr. Freyer wore a face mask, wig, and used a voice modifying microphone in order to assure his anonymity in speaking about his own life experiences as a gay male and the difficulties he encountered within a profession that still considered homosexuality a psychopathology in need of mental health treatment (Kirby, 2003).

Historically when gains are made in human rights for minority cultures there is often an accompanying social, political, and/or religious backlash (Wardle, Strasser, Duncan, & Coolidge, 2003; Washington, 1970). For example, Anita Bryant's 1970's "Save our Children" campaign espoused the idea of a homosexual menace preying upon society (Rutledge, 1992). The reactionary 1996 "Defense of Marriage" Act (DOMA), which made explicit that in the United States "the word marriage means only a legal union between one man and one woman as husband and wife, and the word spouse refers to only a person of the opposite sex who is a husband or a wife" (DOMA, 1996, 110 Stat.2419) is another example. Such political campaigns are designed to keep the general public fearful of a "gay agenda" and ignorant of the realities of how most sexual minorities live their lives.

Society's failure to recognize lesbian and gay relationships has contributed to the gendered response to violence within our society and the lack of services available to address same-sex partner violence (National Coalition of Anti-Violence Programs, 1998). For example, domestic violence shelters, services, training, and interventions were created in response to a model that presupposes a gendered and heterosexual response was required in domestic violence, where it is presumed that males are batterers and females victims (Walker, 2000). Such practices show how deeply ingrained social and cultural biases are and reflect a lack of awareness about how the world is experienced by sexual minorities.
This social context, when reinforced by legal discrimination, was identified by the United States Department of Health and Human Services (2000b) as placing "a significant burden on mental health and personal safety" for most sexual minorities seeking medical care.

### 3.13 HUMAN RIGHTS ISSUES FOR SEXUAL MINORITIES ACROSS THE LIFESPAN

Individually, sexual minorities experience social and political challenges throughout the lifespan that are different than those experienced by heterosexuals. As members of a stigmatized minority, subjected to negative attitudes, violence, and discrimination about their sexual orientation throughout their lifetime (Uribe, 1994), sexual minorities have limited human rights protections.

The following section will describe just some of the social and political challenges that contribute to human rights violations and discrimination of LBGT individuals in the United States.

Socially-constructed gender stereotypes form the norms by which gays, lesbians, bisexuals, and transgendered individuals are viewed as deviant by society (Bancroft, 1974). Females who exhibit non-gender conforming behaviors receive less family and social pressure than males to conform to gendered expectations for behavior, activities, or clothing choices (Hegarty, 2002; Whitley, 2001). Pollack (1999) notes that if exhibiting deviation from expected gender expression, many parents are more worried about a son’s sexual orientation, encouraging “effeminate sons to toughen up and act like a man” (p. 219). Those who do not conform to social
norms for gender, are subjected to discrimination and harassment, (Berrill, 1992; D’Augelli & Grossman, 2001; D’Augelli, Pilkington, & Hershberger, 2002; and Herek, 1991), and are often targets of violence and hate crimes (Franklin, 2000; Whitley, 2001) based on perceived or actual sexual orientation. Acknowledgment of social deviance, especially in gender expectations and behaviors, can lead to the formation of a stigmatized social identity (Grossman, 1997).

LBGT youth face all the complications of adolescence, including navigating sexual attractions and behaviors. This normal adolescent development occurs with a growing understanding that deviation from a heterosexual normative means identification as the stigmatized person within their social context. Some researchers (D’Augelli, 1994; Savin-Williams, 1995) have recognized the difficulties that LBGT youth encounter as they seek to accomplish the developmental task of gaining social acceptance by their peers while they simultaneously come to understand that their attraction to members of the same-sex is not socially acceptable. This challenging convergence is one explanation for heightened risk for suicide attempts among lesbian and gay youth (Sullivan, 2005) as the coming out process typically begins in early adolescence.

Many LBGT youth experience public school as a hostile environment toward sexual minorities. A 2003 national survey by the Gay, Lesbian, and Straight Education Network (GLSEN) found that of the 887 surveyed youth between the ages of 13 and 20 who identified as lesbian, gay, bisexual, or transgender, 9 out of 10 of the students reported that they frequently heard homophobic remarks such as “faggot,” “dyke,” or “that’s so gay” at school, and 4 out of 5 of the students surveyed reported they had experienced verbal harassment by their peers because of their sexual orientation (Kosciw, 2004, p. 5).
In their study of over 12,000 teens, Russell and Joyner (2001) found that 7% of the youths surveyed reported that they had already had same-sex romantic attractions or relationships. Violence was a common result of adolescents’ indicating a same-sex romantic attraction (Russell, Franz, & Driscoll, (2001). A 2003 Gay, Lesbian, Straight Education Network (GLSEN) study found that nearly 20% of surveyed youth reported being physically assaulted, defined as “being punched, kicked, or injured with a weapon” (p. 14) within the previous school year because of their real or perceived sexual orientation, gender, or gender expression. Grossman (1997) reported that many lesbian, gay, and bisexual youth dropped out of high school as a result of the hostility, intimidation, and violence perpetrated by their heterosexual peers.

In addition to social pressures encountered at school or with their peers, LBGT youth can encounter varying degrees of social stigma or acceptance from their family members and their communities. Revelation of non-heterosexual orientation often creates family crises, and, in some cases LBGT youth are faced with homelessness after being thrown out of the family home.

Lesbian, gay, bisexual, and transgender youth are more likely to miss school out of fear for their own safety (Dean, et al., 2000; GLMA, 2001) and are particularly vulnerable to hate crimes based on their sexual orientation. A hate crime is defined by the Federal Bureau of Investigation (FBI) as a bias crime “committed against a person, property, or society that is motivated, in whole or in part, by the offender’s bias against a race, religion, disability, sexual orientation, or ethnicity/national origin” (FBI, 2008).

An estimated 14 - 18% of all the hate crimes reported to the FBI are committed against lesbian, gay, or bisexual people. Local law enforcement agencies record sexual-orientation bias which is then compiled in annual national FBI reports (2008). Hate crimes are not isolated incidents and can be a means to terrorize a stigmatized group. Hate crimes have been highly
correlated with anti-gay rhetoric and behaviors (Franklin, 2000; Patel, Long, McCammon & Wuensch, 1995; Roderick, McCammon, and Long, & Allred, 1998). Hate crimes against LBGT individuals can be means of intimidation against all sexual minorities. The latest hate crime statistics available from the FBI (2008) are from 2006, when 1,415 hate crime offenses based on sexual-orientation bias were reported in the United States. Reports generated from the National Gay and Lesbian Task Force (2007) and the National Coalition of Anti-Violence Programs (2007) have documented reports of more than 35,000 anti-LGBT hate crimes since their data collection started in 1984. These crimes can range from verbal harassment, to physical assaults, to murder. It is important to note that hate crime statistics are based on reported incidents, and that many sexual minorities do not report hate crimes.

This social context for lesbian, gay, bisexual, and transgender individuals is further complicated by current political debates over human rights issues such as whether to legalize or ban same-sex marriage, or policies against open inclusion for military service in the United States. The political divide over legal recognition for same-sex marriage reflects cultural assumptions about and legal definitions of family, both of which can have lifelong negative consequences for LBGT individuals.

According to a U.S. General Accounting Office (GAO) report (2005), same-sex couples are denied more than 1,000 Federal benefits and protections, such as Social Security survivor benefits, pensions, and automatic transfers of property in the case of death of a partner, that are attached to legally-recognized marriages. As of March 2010, legal recognition of same-sex marriage in the United States was limited to only five states (Massachusetts, Connecticut, Iowa, New Hampshire, and Vermont) and the District of Columbia (Human Rights Campaign [HRC], 2010). However, same-sex marriages performed in these states are not currently recognized as
valid couplings outside of these states, and couples entering into such unions are not eligible for any of the marriage benefits offered by our Federal government. The Human Rights Campaign (HRC, 2008b) lobbies for legislative changes and tracks progress of a variety of human rights issues affecting lesbian, gay, bisexual, and transgender individuals, including workplace equality, parenting and custody rights, healthcare, marriage and relationship recognition, hate crimes, aging, and military service issues.

3.14 SUPPORT FOR LESBIAN AND GAY HUMAN RIGHTS

Lesbian and gay human rights issues are intricately linked to social, cultural, and political issues within society. The General Assembly of the United Nations adopted the Universal Declaration of Human Rights on December 10, 1948, and proclaimed that "all human beings are born free and equal in dignity and rights", regardless of "race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status"(Universal Declaration of Human Rights, 1948; Article1, 2). The members of the United Nations "envisaged a world in which every man, woman and child lives free from hunger and is protected from oppression, violence and discrimination, with benefits of housing, healthcare, education and opportunity" (Pillay, 2008, p.1).

Six decades have now passed, and the United Nations has yet to issue human rights documentation that recognizes sexual minorities as a vulnerable group. This is in part because several countries that discriminate on the basis of cultural or religious grounds object that sexual minorities deserve protection under human rights law (Reichert, 2006; Sanders, 1996). While the terminology of sexual orientation, gender identity, and gender expression was
not included in official documentation, clearly the vision was that all human beings were entitled to the respect and dignity of human rights.

Samar (2001) posits that the Universal Declaration of Human Rights clarified political, economic, and social rights with the intention they apply to all people. Rights to life and liberty, to live free from violence, to be treated as an equal in the law, rights to privacy, freedom to travel, peaceably assemble, to fair and public trials are examples of political rights. Many political rights are based on recognition that the government simultaneously supports noninterference with an individual's life balanced with a presumption that all citizens are entitled to specific support (such as presumption of innocence or a fair trial), whereas economic and social rights pertain to the right to obtain employment, to pursue education, to create a family, to access competent healthcare, to procure housing, draw upon social security, and other benefits.

Economic and social rights are either facilitated or denied by social institutions that either discourage or encourage the continuation of the oppression of sexual minorities. For example, the lack of legal recognition of relationships has important implications for issues such as family medical leave, domestic partner benefits, and bereavement policies. It is not uncommon for gays and lesbians to depend more heavily on their family of choice than family of origin, especially when there have been deep conflicts over sexual orientation (Anastas, 2001). Momentum for recognition of same-sex partnerships has been growing internationally; however, the National Gay and Lesbian Task Force (2008) notes that many institutions within the United States are not required to offer domestic partners benefits. Due to lack of federal recognition of their partnerships, sexual minorities continue to be denied the protections offered by such things as Social Security, pension benefits and the Family and Medical Leave Act that are available to married heterosexual couples.
Samar notes that arguments claiming that lesbian, gay, bisexual, and transgender individuals are seeking "special rights" need to be re-examined from a framework not only as to what is morally just but that draws upon traditional legal doctrines regarding privacy, freedom of speech, and equal protection under the law, since these arguments usually are

construed in such a way as to give the appearance that either gays currently have these rights and have chosen not to exercise them, as in marrying someone of the opposite sex, or that no one has these rights, such as a claimed right to engage in same-sex sodomy in the home. But these constructions are facades, creating confusion rather than illuminating reality. They hide the fact that under established institutional arrangements, heterosexual interests of the related kind have already been provided for. Once one penetrates these facades, it becomes evident that many of the claims gays and lesbians are making are to equal rights that have not been afforded them (p. 990).

Peterson and Parisi (1998) contend that governments can embody and mirror the private/public division that sanctions heterosexism as the norm by which all other sexual orientations are considered deviant. "By normalizing heterosexuality, non-heterosexuality of any kind is stigmatized as abnormal, thus fueling persecution for all those who don't conform" (p. 146). It is this process that enables anti-homosexual prejudice to permeate our institutions and deny protections that have been afforded to other stigmatized groups.

Rotello (1998) argues that the fundamental difference is the lack of national support based upon a broad consensus that lesbians and gays have a legitimate claim to human rights protections. Once homosexuality is viewed within a society as a legitimate form of sexual expression and identity, then a global application of rights can logically follow (Rotello, 1998). Arguments over social issues such as the right to marry, to have custody of children or adopt, to
be able to pursue employment or serve in the military, would be rendered moot. It is permissible within our society to discriminate or it is not; if it is not permissible, then individuals encountering discrimination have a means to redress wrongs within our society.

Stereotypes about sexual minorities often focus on sexual behaviors, with the emphasis on how different "they" are from the heterosexual monogamous ideal that is presented as our cultural norm. Barth and Parry (2007) found the choice of longtime lesbian activists Del Martin and Phyllis Lyons as the first couple to be married by Mayor Gavin Newsom of San Francisco (Human Rights Campaign, 2008b) instrumental in humanizing the human rights struggle for a couple denied legal recognition of their relationship in spite of the fact they had been together for 51 years. Such national strategies to humanize gay and lesbian couples have been criticized by Conover (2005) since in drawing public attention to committed couples it forces a public discussion about human rights and notions about justice and discrimination in our marriage laws. In highlighting the human rights aspect rather than focusing on deviant individuals Conover (2005) questions whether it may pave increase social acceptance of sexual minorities. Indeed, mainstream media outlets, by their own coverage of monogamous long-term same-sex unions, were forced to acknowledge that not all gays and lesbians were preoccupied with casual sexual encounters.

The ability to pursue and maintain employment without encountering discrimination is a human rights issue that greatly affects many sexual minorities. A common stereotype of lesbian and gay individuals, especially gay males, is they are more affluent than their heterosexual counterparts, since they don't have "families" requiring care. Dovetailing this is a misconception that economic and work discrimination issues are not pressing human rights issues in the United States (Badgett, 1999). Yet lesbians' and gays' earnings often lag behind those of heterosexual
wage earners due to discriminatory employment practices in the United States, unfair taxation
that disproportionately affects same-sex couples, and concerns about losing employment based
on sexual orientation (Anastas, 2001; Badgett, 1999; Klawitter & Flatt, 1998). For example,
since 2003 Pennsylvania has offered some measure of protection via an executive order (2003-
10) that prohibits state employees from committing discriminatory acts against sexual minorities
in the workplace, although Pennsylvania law itself does not prohibit sexual orientation or gender
identity discrimination by a private employer (HRC, 2008b; HRC, 2010). Most Americans are
unaware that state and federal protection clauses do not cover sexual orientation or gender
identity (Anastas, 2001; Ungar, 2000). Without nondiscrimination protections in state or federal
laws, employers can fire employees who are openly out and/or to refuse to hire someone
suspected to be lesbian, gay, bisexual or transgender because of their sexual orientation or

Rights regarding employment in any country are intrinsically tied to an international
perspective of human rights. In order for companies to remain competitive in the global
marketplace, many are responding to increased social pressure for legal recognition of
partnerships and same-sex marriage by changing employment practices (McGrew, 1998). One of
the organizations that track changes in workplace practices is the Human Rights Campaign Fund
(HRC). Since 2002, HRC has surveyed and published a Corporate Equality Index of inclusive
workplaces for gay, lesbian, bisexual, and transgender employees. Some of the notable
companies rated as maintaining 100 percent compliance for nondiscrimination policies since the
index was first compiled include Aetna, Alcatel-Lucent Technologies, American Airlines, Apple,
Eastman Kodak, Intel Corp, J.P. Morgan Chase, Nike, and Wyndham Worldwide (HRC, 2008e,
Appendix A p.22-26). These companies are setting the pace in the global marketplace for
domestic partner benefits that include healthcare, pension and beneficiary status, and adoption and family medical leave policies recognizing a wider definition of family.

Another human rights issue that is receiving additional scrutiny since the United States is currently embroiled in two wars, is the issue of whether citizens can freely serve their country in the military. The Department of Defense homosexual conduct policy of "Don't Ask, Don't Tell" (DADT) requires all current gay, lesbian, or bisexual military service members to refrain from engaging in any same-sex sexual conduct and to keep their sexual orientation secret (HRC, 2008d; Palm Center, 2008). Under DADT, military service members risk fines, imprisonment, and dishonorable discharge from military service if they are discovered to have participated in same-sex sexual encounters or if they reveal non-heterosexual identity. Although DADT officially bans military personnel from asking other service members any questions about sexual orientation and commanders face restrictions on invasive techniques in investigating sexual orientation allegations, it has been estimated that over 10,000 service members have been discharged because of non-heterosexual orientation since the implementation of DADT in 1993 (Urban Institute, 2008). This number includes over 800 specialists deemed to have "critical skills" for national security and 323 linguists, 55 of who specialize in Arabic, who were forcibly discharged under DADT (United States Government Accounting Office [GAO], 2008).

The GAO, in trying to track the cost to United States taxpayers during fiscal years 1994-2003, to investigate, prosecute, recruit, and train replacement qualified service members due to discharges under DADT, has estimated a range of 190.5 million to 1.2 billion (GAO, 2005; University of California Blue Ribbon Commission, 2006). By the GAO's estimation, the exact fiscal costs to and impact on our nation of losing trained, skilled, military service members cannot be captured in terms of fiscal accounts alone. Many DADT cases remain under
investigation and the ripple effects of recently discharged homosexual military service members may continue to affect our military readiness and response for years to come.

Pervasive and legal discriminatory practices against sexual minorities have resulted in a mixed record of support for lesbian and gay human rights not only within the United States but internationally. Yet, Samar (2001) argues that those seeking to address human rights violations have had to respond to such political and social problems in a piecemeal fashion without the protection of a federal nondiscrimination policy inclusive of sexual orientation and gender identity and expression. While not an international leader in support for lesbian and gay human rights, the United States at least does not condone outright murder of lesbians, gays, bisexual, or transgender individuals. There are still countries that call for those convicted of homosexual behaviors to be executed (such as Iran, Saudi Arabia, Yemen, and the United Arab Emirates) in violation of the international covenant on civil and political rights (Smith, 2010). When countries and political leaders dehumanize lesbians, gays, bisexuals, and transgender people, they contribute to a culture of marginalization based on silence and secrecy. With such actions, "leaders know they are fostering a climate in which the public will not be concerned" about human rights violations since in effect they become "less than human" (Amnesty International, 1999, p. 9).

Years of advocacy for expansion of the 1969 United States federal hate-crime law to cover crimes motivated by a victim's actual or perceived gender, sexual orientation, gender identity, or disability culminated in increased public awareness and ultimate passage of the law. Officially titled the Matthew Shepard and James Byrd, Jr. Hate Crimes Prevention Act, it was passed and signed into law in October, 2009 (Hulse, 2009).
Human rights issues for sexual minorities must always be considered within this complex web of social, political, and legal context in order to understand why it is common for individuals of the LBGT community to struggle with fear of negative reactions and consequences, internalized homophobia, and shame over their sexual orientation (Herek, 1991).

Little information is known about what variables may predict support for human rights issues for LBGT individuals. Some studies have investigated specific links between attitudes and human rights issues in other student populations. Cotton-Huston & Waite, (2000) studied business and psychology students for the effect of educational interventions intended to counteract negative attitudes toward homosexuality. They found strict gender role beliefs, lack of personal acquaintance with a lesbian, gay, or bisexual person, and influence of religious conviction to be predictors of anti-homosexual attitudes. Not surprisingly for such factors, they found that a one-and-a-half-hour workshop about homosexuality did not significantly alter the students' attitudes about homosexuality. Cotton-Huston & Waite (2000) recommended additional research, given the strength of the correlation between personal acquaintances with more positive attitudes. They also recommended curriculum inclusion of structured panel presentations by lesbian and gay guest lecturers to address specific human rights issues, for example, discrimination in employment settings. While a one-time classroom discussion might not influence a student's attitude about sexual orientation or increase support for lesbian and gay human rights issues, Cotton-Huston & Waite (2000) posit that tolerance would be clearly conveyed as an academic value within an institution adopting such changes. Academic institutions have responded to the call for increased education about human rights issues as they relate to sexual minorities by creating courses on cultural diversity or using textbooks that
include chapters on cultural differences (Brookins-Fisher & Thomas, 2003; Resnicow et al., 2002), often without evaluating the effectiveness of such measures.

Individual social contact with gays and lesbians was found to be a significant predictor of whether individuals were more likely to favor nondiscrimination policies and laws protecting sexual minorities (Lewis, 2006). Several studies (Altemeyer, 2001; Klamen, Grossman, & Kopacz, 1999; and Liddle, 1999) have suggested that attitudes about non-heterosexual orientation and support for lesbian and gay human rights issues may affect the care that LBGT individuals receive from future healthcare professionals. A limited number of research studies have indirectly addressed sexual minorities’ human rights issues by attempting to track changes in student attitudes toward homosexuals over the course of a semester (Altemeyer, 2001), or identifying predictors of anti-homosexual attitudes in student populations (Lambert, Ventura, Hall, & Cluse-Tolar, 2006). In the only study that directly surveyed student support for human rights issues for lesbians and gay men, Ellis, Kitzinger, and Wilkinson (2002) surveyed 226 undergraduate psychology students, concluding that the students could not be expected to help lesbian and gay clients adequately without specific academic coursework that educated students about lesbian and gay human rights issues. By comparing only students enrolled across the healthcare professions, we have the opportunity to examine more closely whether students’ attitudes about lesbians and gay men are positively influenced by their professional training. Thus far, there have been no comparative studies between the healthcare professions measuring support for human rights for sexual minorities. This study of healthcare students may provide insight into what variables support lesbian and gay human rights.

This literature review has examined national and local disparities that affect the lives of sexual minorities. Some of the key issues of contact theory and its application to sexual
orientation were explored, as well as the role that personal experience has on attitudes about sexual orientation. What information is known about fostering support for lesbian and gay human rights through changes in social issues and sexual orientation was considered. The importance of curriculum content during the course of academic preparation was also addressed.

Although previous research has linked social contact with more positive attitudes toward sexual minorities, what is not clear is the time-ordering of the issues. For instance, is it because of more contact with gay people that individuals report attitudes that are more positive about gays, or is it that people who have attitudes that are more positive are more likely to nurture the type of social setting where sexual orientation status can be openly discussed and revealed? Likewise, healthcare providers’ attitudes maybe one piece of the puzzle in understanding more about the reasons why LBGT individuals encounter many obstacles when seeking healthcare and may help to explain some of the healthcare disparities between sexual minorities and their heterosexual peers.
4.0 METHODS

The purpose of this study was to document and compare attitudes toward lesbians and gays and support for lesbian and gay human rights among and between first year social work, medical, nursing and dental students, and explore factors predicting attitudes for these students, including academic preparation, prior personal experiences with sexual minorities, political orientation, and frequency of spiritual practice. Additionally, the contribution of these factors in predicting support for lesbians and gays for these healthcare professional students was explored. Quantitative research methods were utilized in this study. This chapter will describe the design and procedures of the study, as well as the participants, measurements, and data analysis.

4.1 DESCRIPTION OF THE STUDY DESIGN

This study was a cross-sectional comparative study of graduate healthcare students attending the University of Pittsburgh in four major healthcare professional academic programs: the School of Social Work, the School of Medicine, the School of Nursing, and the School of Dental Medicine.
4.2 HYPOTHESES

The main hypotheses for this study are:

H1: Social work, medical, nursing, and dental students will differ significantly in their academic preparation and diversity training, personal experiences with non-heterosexual orientation, attitudes about gays and lesbians, and in support for lesbian and gay human rights.

H2: Academic preparation and diversity training will be positively correlated with more favorable attitudes toward lesbians and gays and higher levels of support for lesbian and gay human rights.

H3: More personal experiences with non-heterosexual orientation will be positively correlated with more favorable attitudes toward lesbians and gays and higher levels of support for lesbian and gay human rights.

H4: Conservative political identification will be negatively correlated with favorable attitudes toward lesbians and gays and higher levels of support for lesbian and gay human rights.

H5: Frequent spiritual activity will be negatively correlated with favorable attitudes toward lesbians and gays and higher levels of support for lesbian and gay human rights.
H6: Male healthcare students will have less favorable attitudes toward lesbians and gays lower levels of support for lesbian and gay human rights compared to female healthcare students.

4.3 PROCEDURES FOR THE STUDY

The study utilized a convenience sample of first year students in the social work, medical, nursing, and dental schools of the University of Pittsburgh, Pittsburgh campus. The protocol for the study was reviewed and approved by the University of Pittsburgh Institutional Review Board (IRB clearance # 0603142). A female researcher administered the survey in large classroom settings prior to the start or at the end of regular class sessions. To recruit first year students in each health care discipline, all of the classes included were required foundation or introductory courses for their respective disciplines. To reduce any perceived bias or student concerns about survey participation possibly affecting their grades, the researcher administered the survey while the course instructor waited outside of the classroom. This was also done to help to eliminate any perceived bias in their responses or concerns of handwriting recognized by the instructor to facilitate voluntary survey return.

Confidentiality and anonymity was protected by asking students not to write or sign their names anywhere on the survey. Students were informed that participation was voluntary and no compensation was offered for their time spent in completing the survey. However, informal compensation was made available to students in the form of chocolates or donuts as token appreciation for their time in completing the survey. Before the surveys were distributed, a
prepared statement was read to the entire class (see Appendix I). This statement described the research, informed participants that the survey was anonymous and voluntary, and provided contact information should they have any additional questions or concerns. Students who were willing to participate then completed the survey instrument and placed them in a plastic lock box at the front of the class to assure confidentiality and anonymity. This procedure occurred for all class distributions with the exception of the Introduction to Dentistry class and details of that will be explained below.

Response to the survey was excellent. A total of 520 surveys were originally distributed and returned for this study, of which 512 were completed and usable even though some were missing data, yielding an overall response rate of 98.46%. Both the Social Work and Nursing programs admit part-time students whereas the Schools of Medicine and Dental Medicine admit only full-time students. Only respondents who indicated they were in their first year of their professional training programs were considered for this dissertation. Of the total 369 respondents who indicated they were first year students, there were 111 social work students (30.1%), 102 medical students (27.6%), 73 nursing students (19.8%), and 83 dental students (22.5%).

Permission to present the study at each of the schools involved in the research required several layers of meetings throughout the project with University personnel at each of the professional schools. Department heads and course instructors approved the distribution of the survey. Senior members of the Center for Research on Health and Sexual Orientation (CRHSO) at the University of Pittsburgh facilitated introductions to directors of the medical, dental, and nursing programs, and suggested faculty to contact within each school. Given the survey content, preference was given to any core class that emphasized professional ethics or diversity training.
Some classes were taught in multiple sections. In that case, sections were approached until it was estimated that more than 100 first-year students had participated.

In the social work program there were seven sections of the selected course, Foundations of Social Work Practice with Diverse Populations, offered in the Fall of 2008. After distributing surveys in five of those sections, it was determined that there were at least one hundred surveys returned; the remaining sections were thus not approached about survey distribution.

One class section had just watched a gay themed film prior to survey distribution. This was not intended, nor did any of the lesson plans presented in other Diverse Populations classes so closely match the survey content.

In the School of Medicine, surveys were distributed in Behavior, Illness, and Society (BIS), one of the three core required courses in the first-year curriculum for the medical school.

In the School of Dentistry, surveys were distributed in the required core courses Professionalism in Dentistry and Introduction to Dentistry. Survey distribution in the Professionalism in Dentistry course went as agreed upon and followed an overview lecture that addressed ethics in dental practice. In the Introduction to Dentistry course, a rescheduling of survey distribution meant that it was on the same day as the students were having an exam. The instructors agreed to let me read the introductory statement explaining the study before students took their exam, but requested I set up on a small table in the hallway where students could fill out the survey afterwards. Students were recruited as they left their exam and it appeared that the large majority of students completed the survey. A small number of students not in the class, but who were using the hall at that time, may have also completed the survey. They were included in the final results if they reporting being first year students.
In the School of Nursing, the recommended ethics course ("Ethics for Advanced Practice") was offered only online, yet the same students were also enrolled in Pathology Across the Lifespan. In order to recruit as many first year students as possible, surveys were distributed in three classes, Pathology Across the Lifespan, Research for Evidence-Based Practice, and Health Promotion and Disease Prevention.

Table 1 shows what course was approved for distribution of the survey and its place within the curriculum for each of the participating schools.

**Table 1. Distribution of Survey and Participating Classes**

<table>
<thead>
<tr>
<th>School</th>
<th>Class/ Title</th>
<th>Place within Curriculum</th>
<th>Approached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Work</td>
<td>Foundations of Social Work Practice with Diverse Populations</td>
<td>Foundation required course for Master's program (MSW degree)</td>
<td>Approval of MSW director and approached individual instructors</td>
</tr>
<tr>
<td>Medicine</td>
<td>Behavior, Illness, and Society</td>
<td>Required First Year Foundation course for Medical program (MD degree)</td>
<td>After approval of assistant dean of the Medical School approached individual instructors</td>
</tr>
<tr>
<td>Nursing</td>
<td>Pathophysiology across the Life Span</td>
<td>Foundation courses required for Master's program (MSN degree)</td>
<td>After approval by dean approached individual instructors</td>
</tr>
<tr>
<td>Dental Medicine</td>
<td>Professionalism in Dentistry</td>
<td>Required First Year Foundation course for Predoctoral program (DMD degree)</td>
<td>After approval by dean approached individual instructors</td>
</tr>
<tr>
<td></td>
<td>Introduction to Dentistry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.4 PARTICIPANTS

For this study of first year healthcare students, surveys were completed in the School of Social Work in fall 2008, the School of Medicine in the fall of 2007, the School of Nursing during the fall of 2008, and the School of Dental Medicine during the fall of 2007. Only those respondents who identified as first year students were included in the statistical analysis. Table 2 shows the number of first year respondents and percentage involved in the study from each of the participating schools.

Table 2. Number of First year Respondents and Percentage of Respondents within the Study

<table>
<thead>
<tr>
<th>School of</th>
<th>First year respondents within study</th>
<th>Percentage of respondents within study (N=369)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Work</td>
<td>111</td>
<td>30.1%</td>
</tr>
<tr>
<td>Medicine</td>
<td>102</td>
<td>27.6%</td>
</tr>
<tr>
<td>Nursing</td>
<td>73</td>
<td>19.8%</td>
</tr>
<tr>
<td>Dental Medicine</td>
<td>83</td>
<td>22.5%</td>
</tr>
</tbody>
</table>

The School of Social Work accounted for 30.1% of total participants in the study. From the School of Social Work there were 119 surveys returned with zero returned blank/refused for a total subset response rate of 100%. Of these, 111 survey respondents identified as first year social work students.

The School of Medicine represented 27.6% of total participants involved in the study. There were 128 survey respondents from the School of Medicine, with an additional 8 blank/refused or returned for a total subset response rate of 94.11%. Of these, 102 identified as first year medical students.
The School of Nursing represented 19.8% of the sample used in this study. There were 104 survey responses with 0 returned blank/refused for a total subset response rate of 100%. Of these, 73 identified as first-year nursing students.

The School of Dental Medicine represented 22.5% of the sample used in this study. There were 161 survey responses with an additional 7 blank/refused or returned for a total subset response rate of 95.83%. Of these, 83 identified as first-year dental students.

4.5 MEASUREMENTS

4.5.1 Positive Attitudes Towards Sexual Minorities

*Attitudes toward lesbians and gays.* The 20-item Attitudes Toward Lesbians and Gay Men Scale was originally developed by Herek (1984) to measure respondent homophobic attitudes about gays and lesbians. Items include questions about morality, civil rights, and personal views about homosexuality. Examples of attitudes toward lesbians and gay men scale questions include: "The growing number of lesbians indicates a decline in American morals" and "Homosexual behavior between two men is just plain wrong." The version of the attitudes toward lesbians and gay men scale used in this study utilized a 7-point Likert scale ranging from 0 (strongly disagree) to 6 (strongly agree). This scale was chosen because it has consistently shown high reliability with alpha levels ranges reported from 0.80 to the high 0.90's in a variety of studies (Berkman & Zinberg, 1997; Ellis, Kitzinger, & Wilkinson, 2002, Herek, 1987a, 1987b, 1988,1994, Herek & Capitanio,1996, and Herek & Glunt, 1993). Reliability data from
studies using other student samples for the attitudes toward lesbians and gay men scale yielded coefficient $\alpha = 0.95$.

A composite score was generated for each student on the attitudes toward lesbians and gay men scale by adding together the 20 items after the reverse-scored items were inverted. For data analysis this scale was recoded to reflect a 1-7 scale so that a composite score for each student on the attitudes toward lesbians and gay men scale was obtained by adding together items 1 through 20. Thus the highest possible composite score that could be obtained for positive personal attitudes about sexual orientation would be 140 and the lowest possible composite score would be 20. A higher composite score reflected that the student indicated higher positive personal attitudes about non-heterosexual orientation. A lower composite score obtained indicated the student reported lower or more negative personal attitudes about non-heterosexual orientation. Students were free to add comments regarding their personal attitudes about sexual orientation at the end of the scale. The missing data section below will report respondent data incomplete or missing for the attitudes toward lesbians and gay men scale.

Support for lesbians and gay human rights scale. Ellis, et al. (2002) devised a 25-item scale Support for Lesbians and Gay Human Rights Scale specifically for use in a study with psychology students. Items for the scale were created to ensure that questions about lesbians and gay men were consistent when compared to the Universal Declaration of Human Rights as adopted on December 10, 1948 by the General Assembly of the United Nations (Universal Declaration of Human Rights, 1948). Approximately one-third of the support for lesbian and gay human rights items are worded as opposing lesbian and gay human rights necessitating reverse-scoring when coding responses. The support for lesbian and gay human rights scale was originally created on a 5-point Likert scale from 0 (strongly disagree) to 4 (strongly agree) For
the purposes of this study, the support for lesbian and gay human rights scale was modified to a 7-point Likert scale to maintain uniformity with the attitudes toward lesbians and gay men scale and consistency of the survey design. Examples of support for lesbian and gay human rights questions include: "A country should have the right to impose the death penalty on lesbians and gay men if that is consistent with that culture's values and beliefs" and "Lesbians and gay male couples should be legally permitted to marry, just as heterosexual couples." The missing data section below will report respondent data incomplete or missing for the support for lesbian and gay human rights scale.

A composite score was generated for each student on the support for lesbian and gay human rights scale by adding together the 25 items after the reverse-scored items were inverted. For coding purposes, response numbers were converted to a 1 to 7 scale. Composite scores generated could range from 25 to 175 with higher composite scores indicating more support for lesbian and gay human rights. Lower composite scores reflected less support for lesbian and gay human rights. Students were free to add comments regarding human rights and sexual orientation at the end of the scale.

### 4.5.2 Constructs Predicting Positive Attitudes Towards Sexual Minorities

#### 4.5.2.1 Academic Preparation

Academic preparation was measured by two scales within the study. One of the two scales, Academic Preparation, also included a single item very relevant to the study, which is also described separately as Sexual Orientation Academic Preparation.

*Academic preparation.* The 15-item Academic Preparation (APREP) scale was originally developed for use in a pilot project by Carrick and Doleno in 2003. During construction of this
scale, an item pool of 15 concepts typically encountered in diversity training, such as racism, classism, sexual orientation, discrimination, and prejudice, was generated. This scale generated a reliability of $\alpha = 0.96$ in the pilot project. Students were asked to rate their academic preparation on a 7-point Likert scale from 0 (unprepared) to 6 (very prepared). An item score of zero then reflected a student's self-report of feeling very unprepared to deal with a particular issue, while an item score of six reflected the student’s feeling very prepared on a particular issue from their academic program. For data analysis this scale was recoded to reflect a 1-7 scale so that a composite score for each student on the academic preparation scale was obtained by adding together items 1 through 15. Thus, the highest composite score that could be obtained would be 105, and the lowest composite score would be 15. Higher composite scores reflected that students indicated high academic preparation on a variety of diversity issues. Lower composite scores indicated that students reported low academic preparation for diversity issues. Students were free to add comments regarding their academic preparation at the end of the scale. The academic preparation scale is a complex measure of many topics covered in diversity training courses.

*Sexual Orientation Academic Preparation.* One item of the academic preparation test requested students to report specifically about their academic preparation to address sexual orientation.

The missing data section below will report respondent data incomplete or missing for the academic preparation scale, including the item specifically addressing sexual orientation.

*Diversity Training.* The three item diversity training score was generated for this study from student responses to three questions including "I have taken a college level course on diversity"; "Some of my college courses have mentioned diversity" and "I have participated in a
diversity workshop/training". This was in an attempt to measure what exposure a student had to
diversity issues prior to their current academic program. Students could indicate either "yes",
"no", or "not sure", for statistical analysis, responses of "no" or "not sure" were collapsed into
one category. The diversity training variable was coded to distinguish students' relative exposure
to diversity issues, such that assigned scores reflected the greatest exposure to diversity issues.
Students who indicated that they had taken a college course on diversity were assigned a score of
3, students who had taken a workshop on diversity issues were assigned a score of 2, and
students who had diversity mentioned in a college course were assigned a score of 1. Students
who indicated no exposure to diversity training were assigned a score of zero. Higher composite
scores reflected that students indicated previous exposure to training on diversity. Lower
composite scores indicated that students reported low exposure to training on diversity. The
missing data section below will report respondent data incomplete or missing for the diversity
training scores.

4.5.3 Other Factors Predicting Positive Attitudes Towards Sexual Minorities

4.5.3.1 Social Contact Predicting Positive Attitudes Towards Sexual Minorities

Social contact was measured by the personal experiences with non-heterosexual orientation scale
within the study.

Personal experiences with Non-Heterosexual Orientation. Originally developed for the
pilot project by Carrick and Doleno in 2003, the adaption from an unpublished scale created by
Knudsen (2003) which had a reported excellent reliability of $\alpha =0.90$ for measuring personal
experience with individuals who were mentally ill. Questions were altered to end with the phrase
"who is/are LBGT" (rather than "a person/persons with a mental illness").
The personal experiences with non-heterosexual orientation scale is a categorical scale with students answering either “yes” or “no” to a series of questions such as "I have known a person who is LBGT" and "I have friends who are LBGT." Examples of items on the personal experience scale include "I have watched a television show featuring people who are LBGT" and "I have a relative who is LBGT." A composite score for each student on the personal experience scale was obtained by assigning a value of one (1) to “yes” and a value of zero (0) to “no,” then adding together the values assigned to responses to the fourteen items. The highest composite score that could be obtained would thus be 14 and the lowest composite score would be zero. A higher composite score reflected that a student indicated high level of personal experience with diverse sexual orientation. A lower composite score indicated that the student reported a low level of personal experience with diverse sexual orientation. Students were free to add comments regarding their personal experience with diverse sexual orientation at the end of the scale. The missing data section below will report respondent data incomplete or missing for the personal experience scale.

4.5.3.2 Other variables Predicting Positive Attitudes Towards Sexual Minorities

Demographic information. In addition to commonly-collected demographic variables such as age, ethnicity, and gender, this study specifically requested participants to self-report demographic variables that have been shown to predict positive attitudes towards sexual minorities. The missing data section below will report respondent data with incomplete or missing demographic information.
Political Affiliation

Students were asked to rate their political affiliation on a single item Likert scale from 1 (extremely conservative) to 7 (extremely liberal). Students with missing data from this item were excluded from statistical analysis.

Frequency of Spiritual Activities

Students were asked to indicate the frequency of their spiritual activities in forced-choice categories of daily, weekly, monthly, yearly, or other.

4.6 MISSING DATA

For each questionnaire, cases were accepted for analysis if they were missing less than 15% of the items in the questionnaire. So for example, since academic preparation was a 15 item scale, any cases that the respondent failed to answer 3 items a total score for that respondent was not computed.

Attitudes toward lesbians and gays

For the attitudes toward lesbians and gay men, (a 20 item scale) cases that the respondent any cases that the respondent failed to answer 4 or more items or more were excluded. For attitudes toward lesbians and gay men, 1 respondent failed to answer 12 items, and another respondent failed to answer 20 items, so a total of 2 cases (0.54%) were excluded from analysis. 20 respondents were missing 1 item (5.42%) and 2 respondents were missing 2 items (0.54%). For those respondents, their missing values were replaced by the average of the items on the scale that they had completed.

Support for lesbians and gay human rights scale
For the support for lesbian and gay human rights, (a 24 item scale) cases that the respondent any cases that the respondent failed to answer 4 or more items or more were excluded. For support for lesbian and gay human rights, 1 respondent failed to answer 6 items, one respondent failed to answer 8 items and another respondent failed to answer 9 items, and another respondent failed to answer 11 items so a total of 4 cases (1.08%) were excluded from analysis. 19 respondents were missing 1 item (5.15%), 3 respondents were missing 2 items (0.81%), and 1 respondent missed 3 items (0.27%). For those respondents, their missing values were replaced by the average of the items on the scale that they had completed.

*Academic preparation*

For the academic preparation scale, one respondent failed to answer 3 items, and another respondent failed to answer all 15 items so these two cases (0.54%) were excluded from analysis. 18 respondents were missing 1 item (4.88%) and 5 respondents were missing 2 items (1.36%). For those respondents, their missing values were replaced by the overall sample mean of the missing item. For the purposes of this study, multiple regressions will be run using scores from the full scale and repeated using only the single item of sexual orientation for statistical analysis.

*Sexual orientation academic preparation*

A single item from the academic preparation scale measured how well students had been prepared to address sexual orientation issues. For this single item of sexual orientation measure, 3 respondents had missing data (.8%). For those respondents, their sexual orientation academic preparation score were assigned the overall sample mean of the sexual orientation academic preparation score.

*Diversity Training*
For the diversity training measure, (a 3 item scale) 4 respondents were missing 1 item (1.08%), and 3 respondents were missing all three items (0.81%). For those respondents, their total diversity score were assigned the overall sample mean of the total diversity scale.

**Personal experiences with Non-Heterosexual Orientation**

For the social contact measure of personal experience (a 14 item scale) any cases where the respondent failed to answer 3 items or more were excluded. One respondent failed to answer 3 items, and another respondent failed to answer 4 items, and another respondent failed to answer 6 items so a total of 3 cases (0.81%) were excluded from analysis. 8 respondents were missing 1 item (2.17%) and 2 respondents were missing 2 items (0.54%). For those respondents, their missing values were replaced by overall sample mean of the same item on the scale.

**Political Affiliation**

Fourteen respondents failed to answer the question regarding political affiliation (3.79%). Respondents missing values for political affiliation were dropped from the statistical analysis.

**Frequency of Spiritual Activities**

For the single-item variable of frequency of spiritual activities, there were 78 respondents who failed to answer (21.1%). Since such a large number of respondents chose not to answer this question, and it was not possible to estimate the frequency of their spiritual activities, missing values were not replaced. Multiple regression analysis was conducted both excluding and including the frequency of spiritual activities variable.

**Demographic information**

Five respondents did not report their gender, and twelve respondents did not report their age. These values were not replaced, and these participants are missing from analyses requiring the gender or age variables.
4.7 DATA ANALYSIS

SPSS program version 18 was used for all data analysis for this study. Composite scores were first calculated from each individual respondent's academic preparation score, personal experiences with non-heterosexual orientation score, attitudes toward lesbians and gay men score and support for lesbian and gay human rights score.

Descriptive statistics for first year students from the four healthcare profession schools were calculated for age, ethnicity, religious affiliation, frequency of spiritual activities, level of education completed, extent of diversity training, years of healthcare experience, total household income, political affiliation, gender, sexual orientation, and relationship status.

The first goal of the study was to explore differences between the healthcare student groups on self-reported academic preparation for sexual orientation, academic preparation score, diversity training, personal experiences with non-heterosexual orientation, frequency of spiritual practice, political affiliation, attitudes toward lesbians and gay men, and support for lesbian and gay human rights. Separate one-way analysis of variance (ANOVA) procedures were conducted to address that goal.

The second goal was to explore predictors of attitudes toward lesbians and gay men, and support for lesbian and gay human rights in first year students in the health care professions. The association of the major factors expected to predict attitudes toward lesbians and gay men, and support for lesbian and gay human rights were explored using regression analyses. Preliminary analyses included stepwise and simultaneous techniques. There is some concern that stepwise regressions can "overfit the data because they take advantage of chance relationships in the sample" (Newton & Rudestam, 1999, p.254). As there are theoretical reasons for including the
variables used within the analyses to determine significant predictors, the final regressions reported in the results section are simultaneous.
5.0 RESULTS

5.1 DEMOGRAPHIC CHARACTERISTICS

Only respondents who indicated they were in their first year of their professional training programs were considered for this dissertation. The majority of respondents (N=290) or 81.2% identified themselves as being between 21 and 28 years of age. The mean age for all respondents was 26.04 with a range of 21 to 54 years. A total of 12 respondents (3.3%) did not specify their age. Social Work participant mean age was 26.69 with a range from 21 to 52 years. Medical participant mean age was 24.81 with a range from 22 to 34 years. Nursing participant mean age was 29.01 with a range from 21 to 54 years. Dental participant mean age was 24.25 with a range from 21 to 42 years.

The sample consisted of 227 female respondents (62.5%), 136 male respondents (37.5%), with no first year respondents identifying as transgender. The remaining 6 respondents did not identify their gender (1.6%). Table 3 shows demographic characteristics across the participating schools.
Table 3. Demographic Characteristics across the Participating Schools

<table>
<thead>
<tr>
<th></th>
<th>Social Work N=111</th>
<th>Medicine N=102</th>
<th>Nursing N=73</th>
<th>Dental Medicine N=83</th>
<th>Test Statistic</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age, (SD)</td>
<td>26.49&lt;sub&gt;b&lt;/sub&gt; (6.36)</td>
<td>24.81&lt;sub&gt;c&lt;/sub&gt; (2.39)</td>
<td>29.01&lt;sub&gt;a&lt;/sub&gt; (7.96)</td>
<td>24.25&lt;sub&gt;c&lt;/sub&gt; (3.35)</td>
<td>F (3,353) = 12.11</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>Female Respondents</td>
<td>90 (81.1%)</td>
<td>43 (43.9%)</td>
<td>64 (88.9%)</td>
<td>30 (36.6%)</td>
<td>Χ&lt;sup&gt;2&lt;/sup&gt; (3, N=363) = 75.77</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>% White</td>
<td>83 (75.5%)</td>
<td>58 (58.0%)</td>
<td>62 (86.1%)</td>
<td>59 (72.0%)</td>
<td>Χ&lt;sup&gt;2&lt;/sup&gt; (3, N=364) = 17.48</td>
<td>p &lt; .01</td>
</tr>
<tr>
<td>%&lt;10,000 Income</td>
<td>19 (17.8%)</td>
<td>37 (42.5%)</td>
<td>1 (1.4%)</td>
<td>22 (27.8%)</td>
<td>Χ&lt;sup&gt;2&lt;/sup&gt; (3, N=342) = 39.42</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>% With Previous</td>
<td>8 (7.2%)</td>
<td>8 (7.9%)</td>
<td>5 (6.9%)</td>
<td>4 (4.8%)</td>
<td>Χ&lt;sup&gt;2&lt;/sup&gt; (3, N=368) = 0.72</td>
<td>p = .868</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Heterosexual</td>
<td>101 (91.0%)</td>
<td>90 (91.8%)</td>
<td>68 (94.4%)</td>
<td>81 (97.6%)</td>
<td>Χ&lt;sup&gt;2&lt;/sup&gt; (3, N=364) = 3.93</td>
<td>p = .269</td>
</tr>
<tr>
<td>% Married/</td>
<td>38 (91.0%)</td>
<td>23 (91.8%)</td>
<td>49 (94.4%)</td>
<td>22 (97.6%)</td>
<td>Χ&lt;sup&gt;2&lt;/sup&gt; (3, N=361) =</td>
<td>p &lt; .001</td>
</tr>
</tbody>
</table>
The ethnic and racial breakdown of the students in the sample included 261 respondents self-identified as Caucasian, White, or European (72.0%). Thirty-three respondents self-identified as African American or Black (9.1%). Fourteen respondents self-identified as Hispanic or Latino (3.8%). Forty-five respondents self-identified as Asian or Pacific Islander (12.4%). Five respondents self-identified as Multiracial (1.4%), and 5 respondents self-identified as being from other ethnic groups (1.4%). A total of 5 respondents (1.4%) did not specify their ethnic origin.

Religious affiliation reported within the total sample varied widely, as respondents responded to an open-ended question asking them to identify their primary religious affiliation rather than a forced-choice question. As a result of this format, a total of 27 categories were generated and are listed in Appendix VII. The open-ended nature of the question precluded a reliable scheme for collapsing individual religious affiliations into more general, inclusive categories for purposes of analysis. Respondents were also asked to identify the frequency of their spiritual activities. Fourteen respondents did not respond (3.8%). However, 83 respondents indicated they engaged in spiritual activities daily (23.4%), and 82 indicated weekly activities (23.1%). Forty-nine respondents indicated that they engage in monthly spiritual activities (13.8%) and 57 indicated yearly activities (16.1%). Twenty respondents indicated that they never
engage in spiritual activities (5.6%), while 64 respondents indicated "other" in reporting the frequency of their spiritual activities (18.0%).

Three hundred forty respondents indicated they had at least a bachelor's level of education (92.4%), with 21 reporting they had previously obtained a master's (5.7%) and 4 indicating they had already obtained a doctoral degree (1.1%), prior to their first year of study within their professional program. One participant did not indicate their educational level (0.3%).

Although the surveys were distributed in introductory foundation courses for all of the groups, there was some variation in responses to the question "what level are you in your program?" Of the total respondents, 369 (75.8%) reported they were in their first year of their respective professional programs. Forty-two respondents reported themselves to be in their second year (8.6%), 29 reported they were in their third year (6.0%), and 47 reported they were in their fourth year (9.7%). Twenty five respondents did not specify their year of study.

On the questions regarding diversity training, 228 respondents indicated that they had "taken a college level course on diversity" (62.6%), and 117 indicated they had not taken a college diversity course (32.1%). Nineteen respondents indicated they were not sure if they had or had not taken a college-level diversity class (5.2%). There were 5 respondents who did not answer this question (1.4%). However, the majority of students (89.9%) or 329 respondents, indicated that some of their college courses had at least mentioned diversity issues. Only 7.7% of the overall sample or 28 respondents indicated that they had not encountered diversity issues in their college courses. Nine respondents (2.5%) reported they were unsure if diversity issues had been addressed in their college courses and 3 (0.8%) neglected to respond to the question. While some college majors do not require diversity training, it is possible for healthcare students actively to seek out additional workshops or trainings. Of the total sample, 230 respondents
(63.2%) reported that they had "participated in a diversity workshop or training", 115 (31.6%) indicated that they had not, and 19 (5.2%) indicated they were unsure if they had. Five respondents (1.4%) did not report their diversity training experience.

The number of years of healthcare experience reported for all the students in the sample ranged from 0 (30.7% of the total sample) to 26 years (only one respondent, or 0.3% of the sample). Eighty-five percent reported 5 years or less of healthcare experience and 61.8% of those reported they had less than 2 years of healthcare experience. More than any other demographic question in the survey tool, 63 respondents (17.1%) neglected to report their years of healthcare experience.

There were stark differences reported for total household income for respondents. Seventy nine respondents (23.1%) making under $10,000. Fifteen respondents (4.4%) reported income between $10,000 and $15,000. Eleven respondents (3.2%) reported income between $16,000 and $20,000. Thirty respondents (8.8%) reported income between $21,000 and $25,000. Twenty-six respondents (7.6%) reported income between $26,000 and $30,000. Twelve respondents (3.5%) reported income between $31,000 and $35,000. Sixteen respondents (4.7%) reported income between $36,000 and $40,000. Eighteen respondents (5.3%) reported income between $41,000 and $45,000. Eleven respondents (3.2%) reported income between $46,000 and $50,000. Seventeen respondents (5.0%) reported income between $51,000 and $60,000. Nineteen respondents (5.6%) reported income between $61,000 and $70,000. The remaining 88 respondents (25.7%) reported income over $71,000. Twenty seven respondents (7.3%) did not report their total household income.

Of the 355 respondents who reported their usual stance on political issues, 6 respondents reported they were "extremely conservative" (1.7%), 40 reported "moderately conservative"
(11.3%), and 39 reported "slightly conservative" (11.0%). Sixty six respondents (18.6%) declared themselves "neutral" on political issues. Fifty-nine respondents (16.6%) reported they were "slightly liberal", 110 (31.1%) reported they were "moderately liberal" and 35 (9.9%) reported they were "extremely liberal." Fourteen respondents (3.8%) declined to identify their political stance.

With regard to sexual orientation, the majority of the sample (93.4%), or 340 respondents, identified themselves as heterosexual. A total of 6 respondents (1.6%) identified themselves as lesbian or gay, and 13 (3.6%) identified as bisexual. Another 4 respondents (1.1%) indicated they were not sure of their sexual orientation, while 1 respondent (0.3%) identified as "other" regarding their sexual orientation. There were 5 respondents (1.4%) who did not specify their sexual orientation.

The last demographic question asked respondents to identify their relationship status. Of the total respondents who indicated a response, 122 indicated they were single (33.8%), 98 indicated they were dating (27.1%), 54 indicated they were partnered/cohabitating (15.0%), 78 indicated they were married (21.6%), 6 reported they were divorced (1.7%), 3 reported they were engaged (0.8%), and 8 respondents neglected to identify their relationship status (2.2%).
5.2 SCALE RELIABILITY

In order to measure internal consistency or reliability, Cronbach’s α was calculated for each of the scales used within this study. The 15-item Academic Preparation Scale (APREP) had an excellent $\alpha = 0.963$. The 14-item Personal experiences with Non-Heterosexual Orientation (PER EX) scale had an $\alpha = 0.70$ which is still considered adequate reliability. The 20-item Attitudes Toward Lesbians and Gay Men Scale, as expected for such a widely-used standardized scale generated a high $\alpha = 0.965$. The 25-item Support for Lesbians and Gay Human Rights Scale modified for this study yielded an excellent $\alpha = 0.945$.

5.3 HYPOTHESIS TESTING RESULTS

5.3.1 Differences between healthcare student groups

H1. Social work, medical, nursing and dental students will differ significantly in their academic preparation and diversity training, Personal experiences with Non-Heterosexual Orientation, attitudes about gays and lesbians, and in support for lesbian and gay human rights. One-way ANOVA tests were conducted on each of these four major scales in order to compare mean scores between the four healthcare student groups. Student-Newman-Keuls post hoc tests were used to test for significant mean differences when the overall F-test was significant. Table 4 summarizes the ANOVA results for Hypothesis 1 testing the main dependent variables by student type.
Table 4. Analysis of Variance of Primary Variables by Student Type

<table>
<thead>
<tr>
<th>Measure</th>
<th>Social Work Student</th>
<th>Medical Student</th>
<th>Nursing Student</th>
<th>Dental Student</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes Toward Lesbians and Gay Men</td>
<td>$M= 118.91_{a}$, $SD= 22.32$</td>
<td>$M= 120.75_{a}$, $SD= 19.16$</td>
<td>$M= 104.14_{b}$, $SD= 27.21$</td>
<td>$M= 96.99_{b}$, $SD= 29.73$</td>
<td>$F (3,363) = 20.19$, $p &lt; .001$</td>
</tr>
<tr>
<td>Support for Lesbian and Gay Human Rights</td>
<td>$M= 145.79_{a}$, $SD= 22.53$</td>
<td>$M= 142.52_{a}$, $SD= 17.89$</td>
<td>$M= 126.33_{b}$, $SD= 27.98$</td>
<td>$M= 122.33_{b}$, $SD= 24.88$</td>
<td>$F (3,361) = 23.07$, $p &lt; 0.001$</td>
</tr>
<tr>
<td>Academic Preparation</td>
<td>$M= 79.58_{a}$, $SD= 14.71$</td>
<td>$M= 71.56_{b}$, $SD= 15.17$</td>
<td>$M= 72.53_{b}$, $SD= 18.23$</td>
<td>$M= 62.50_{c}$, $SD= 23.06$</td>
<td>$F (3,365) = 14.77$, $p &lt; 0.001$</td>
</tr>
<tr>
<td>Sexual Orientation Academic Preparation</td>
<td>$M= 5.42_{a}$, $SD= 1.23$</td>
<td>$M= 5.31_{a}$, $SD= 1.34$</td>
<td>$M= 4.63_{b}$, $SD= 1.58$</td>
<td>$M= 3.95_{c}$, $SD= 1.92$</td>
<td>$F (3,365) = 18.69$, $p &lt; 0.001$</td>
</tr>
<tr>
<td>Diversity Training</td>
<td>$M= 2.93_{a}$, $SD= 0.42$</td>
<td>$M= 2.45_{b}$, $SD= 0.69$</td>
<td>$M= 2.00_{c}$, $SD= 1.01$</td>
<td>$M= 1.80_{c}$, $SD= 1.17$</td>
<td>$F (3,365) = 34.92$, $p &lt; 0.001$</td>
</tr>
<tr>
<td>Personal Experiences with Non-Heterosexual Orientation</td>
<td>$M= 9.53_{a}$, $SD= 2.77$</td>
<td>$M= 9.05_{a}$, $SD= 2.20$</td>
<td>$M= 8.17_{b}$, $SD= 2.51$</td>
<td>$M= 7.12_{c}$, $SD= 2.83$</td>
<td>$F (3,365) = 15.47$, $p &lt; 0.001$</td>
</tr>
<tr>
<td>Frequency of Spiritual Practice</td>
<td>$M= 3.71_{a}$, $SD= 0.99$</td>
<td>$M= 3.22_{b}$, $SD= 1.36$</td>
<td>$M= 3.66_{a}$, $SD= 1.10$</td>
<td>$M= 3.50_{ab}$, $SD= 0.95$</td>
<td>$F (3,365) = 17.43$, $p &lt; 0.001$</td>
</tr>
<tr>
<td>Political Affiliation</td>
<td>$M= 5.26_{a}$, $SD= 1.56$</td>
<td>$M= 5.04_{a}$, $SD= 1.25$</td>
<td>$M= 4.18_{b}$, $SD= 1.49$</td>
<td>$M= 3.96_{b}$, $SD= 1.54$</td>
<td>$F (3,365) = 17.43$, $p &lt; 0.001$</td>
</tr>
</tbody>
</table>

Note. Means in the same row that do not share subscripts differ at $p < 0.05$ by the Student-Newman-Keuls post hoc test.
5.3.1.1 Attitudes toward Lesbians and Gays

Attitudes toward Lesbians and Gays scale scores ranged from 32 to 140 with higher composite scores indicating positive personal attitudes about non-heterosexual orientation. On the attitudes toward lesbians and gay men scale medical students and social work students scored significantly higher than nursing students and dental students.

5.3.1.2 Support for Lesbian and Gay Human Rights

Support for Lesbian and Gay Human Rights Scale scores ranged from 43 to 168 with higher composite scores indicating more support for lesbian and gay human rights. On the support for lesbian and gay human rights, scale social work and medical students scored higher than nursing and dental students.

5.3.1.3 Academic Preparation

Academic Preparation scale scores ranged from 15 to 105 with higher composite scores indicating self report of more academic preparation on a variety of diversity issues. On the academic preparation scale, social work students scored significantly higher than nursing and medical students who scored significantly higher than dental students.

5.3.1.4 Sexual Orientation Academic Preparation

Sexual Orientation Academic Preparation scores ranged from 1 to 7 with higher scores indicating self report of more academic preparation on sexual orientation issues. Social work and medical students scored significantly higher than nursing students, who scored significantly higher than dental students.
5.3.1.5 Diversity Training

Diversity training scores ranged from 0 to 3 with higher scores indicating more exposure to diversity issues. On the diversity training scores, social work students scored significantly higher than medical students who scored significantly higher than both nursing and dental students.

5.3.1.6 Personal experiences with Non-Heterosexual Orientation

Personal experiences with Non-Heterosexual Orientation scale scores ranged from 0 to 14 with higher composite scores indicating higher levels of personal experience with diverse sexual orientation. On the personal experience scale, social work students and medical scored higher than nursing students, all of whom scored higher than the dental students.

5.3.1.7 Frequency of Spiritual Practice

Frequency of Spiritual Practice scores ranged from 1 to 5 with higher scores indicating more frequent spiritual activities. On the frequency of spiritual practice scores, social work and nursing students scored significantly higher than medical students. Dental students did not significantly differ from any of the other groups.

5.3.1.8 Political Affiliation

Political Affiliation scores ranged from 1 to 7 with lower scores indicating more conservative political affiliation and higher scores indicating a more liberal political affiliation. On the political affiliation scores, social work and medical students had more liberal political affiliations than both nursing and dental students.
5.3.1.9 Correlation Matrix and variable selection for Attitudes towards Lesbians and Gay Men

As revealed by the correlation matrix (Table 5), the relatively low correlations between gender and age and attitudes toward lesbians supported revising the simultaneous regression model to exclude these variables. Thus a new model for the revised tested regression for attitudes toward lesbians and gay men in using the full academic preparation scores are depicted in Figure 4. Results for testing this model are presented in Table 6. Further testing of the regression model for attitudes toward lesbians and gay men substituted only the single item sexual orientation academic preparation item are depicted in Figure 5 and results are presented in Table 7.
Table 5. Correlation Matrix between predictor variables and independent variables

<table>
<thead>
<tr>
<th></th>
<th>ATLG</th>
<th>SLGHR7</th>
<th>APREP</th>
<th>SOAP</th>
<th>PER EXP</th>
<th>Frequency</th>
<th>Political</th>
<th>Diversity Training</th>
<th>Gender</th>
<th>Age</th>
<th>Social Work Student</th>
<th>Medical Student</th>
<th>Nursing Student</th>
<th>Dental Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward lesbians and gays (ATLG)</td>
<td>-</td>
<td>.903**</td>
<td>.194**</td>
<td>.286**</td>
<td>.525**</td>
<td>-.379**</td>
<td>.241**</td>
<td>.582**</td>
<td>-.156**</td>
<td>-.145**</td>
<td>.184**</td>
<td>.216**</td>
<td>-.140**</td>
<td>-.300**</td>
</tr>
<tr>
<td>Support Lesbian and Gay Human Rights (SLGHR7)</td>
<td>-</td>
<td>-</td>
<td>.212**</td>
<td>.290**</td>
<td>.522**</td>
<td>-336**</td>
<td>.274**</td>
<td>.607**</td>
<td>-.175**</td>
<td>-.138**</td>
<td>.264**</td>
<td>.165**</td>
<td>-.185**</td>
<td>-.290**</td>
</tr>
<tr>
<td>Academic Preparation (APREP)</td>
<td>-</td>
<td>-.840**</td>
<td>.239**</td>
<td>.013</td>
<td>.174**</td>
<td>-.128**</td>
<td>-.188**</td>
<td>-.105**</td>
<td>.262**</td>
<td>-.019</td>
<td>.011</td>
<td>0.185</td>
<td>-.278**</td>
<td>-</td>
</tr>
<tr>
<td>Sexual orientation academic preparation (SOAP)</td>
<td>-</td>
<td>-.240**</td>
<td>-.087</td>
<td>.187**</td>
<td>.186**</td>
<td>-.166**</td>
<td>-.114**</td>
<td>.211**</td>
<td>-.157**</td>
<td>-.085</td>
<td>-.319**</td>
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<tr>
<td>Personal Experience (PER EXP)</td>
<td>-</td>
<td>-.119**</td>
<td>.244**</td>
<td>.399**</td>
<td>-.126**</td>
<td>-.027</td>
<td>.226**</td>
<td>.105**</td>
<td>-.075</td>
<td>-.289**</td>
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<tr>
<td>Frequently</td>
<td>-</td>
<td>-.039</td>
<td>-.271**</td>
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<td>.112**</td>
<td>-.161**</td>
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Note: *p < 0.05, **p < 0.01, ***p < 0.001
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<td>-.326</td>
<td>-.353</td>
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<td>Dental Student</td>
<td>369</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. **Correlation is significant at .01 level (two-tailed).*
*Correlation is significant at .05 level (two-tailed).*
Total number of respondents (N) appear below each correlation.
5.3.2 Multiple Regression Testing Predictors of Attitudes Towards Lesbians and Gay Men

H2: Academic preparation and diversity training will be positively correlated with more favorable attitudes toward lesbians and gays.

H3: More Personal experiences with Non-Heterosexual Orientation will be positively correlated with more favorable attitudes toward lesbians and gays.

H4: Frequent spiritual activity will be negatively correlated with favorable attitudes toward lesbians and gays.

H5: Conservative political identification will be negatively correlated with favorable attitudes toward lesbians and gays.

H10: Male healthcare students will have less favorable attitudes toward lesbians and gays compared to their female healthcare student peers.

A simultaneous regression analysis was conducted to test these hypotheses. Dummy coding was used in order to include the student group variable within regression analysis. In creating the dummy variables, (dummy social work, dummy medical, dummy nurse, and dummy dental), the respective student groups were assigned values of "1" or "0" to indicate their group membership. For regression analysis, social work students served as the reference group and therefore the dummy variable social work was not included. This dummy coding was used for all regression analyses.

Results for the regression analysis predicting attitudes toward lesbians and gay men for first year respondents are presented in Table 6. In the first section of the table, the $R$ value of 0.716 indicates that the combined predictor variables are highly correlated with attitudes toward
lesbians and gay men. The three statistically significant predictor variables (political affiliation, personal experience, and frequency of spiritual activity) combined accounted for 52% of variance in respondent attitudes, $R^2 = 0.51$ $p$ value $<0.001$. The significant $F$ value of 41.14 indicates that as a group the predictor variables explain a statistically significant proportion of the variance in attitudes towards lesbians and gay men.

Academic preparation ($\beta = 0.048$), and diversity training ($\beta = 0.005$) were not found to be significant predictors to the standard $p$ value of $p<0.001$ in the simultaneous multiple regression of attitudes toward lesbians and gays, so Hypothesis 2 is not supported.

Personal experience with non-heterosexual orientation was the second strongest predictor of favorable attitudes toward lesbians and gays in the simultaneous regression. Individuals reporting that they had more personal experience with non-heterosexual orientation (i.e. had more exposure to lesbian, gay, bisexual, and transgender people) had more positive attitudes toward lesbians and gay men ($\beta = 0.304$).

As expected, frequency of spiritual practice was negatively correlated with favorable attitudes toward lesbians and gays. Respondents who reported they engaged more frequently in spiritual activities ($\beta = -0.240$) had more negative attitudes toward lesbians and gay men.

For attitudes towards lesbians and gay men, the strongest predictor variable was political identification ($\beta = 0.342$). Respondents with more liberal political identification had more positive attitudes toward lesbians and gay men.

The variables of student type, dental students ($\beta = -0.116$), medical students ($\beta = 0.039$), nursing students ($\beta = -0.065$) were not significant predictor variables for attitudes toward lesbians and gay men to the standard $p$ value of $p<0.001$. 
Table 6. Simultaneous Multiple Regression Results: Predicting Attitudes Towards Lesbians and Gay Men (N=366)

<table>
<thead>
<tr>
<th>Variance explained</th>
<th>R</th>
<th>RSquare</th>
<th>Adjusted R Square</th>
<th>Std. Error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.716</td>
<td>0.513</td>
<td>0.502</td>
<td>18.54</td>
</tr>
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</table>

ANOVA results for Attitudes toward Lesbians and Gay Men

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F Value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
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<td>16201.09</td>
<td>47.14</td>
</tr>
<tr>
<td>Residual</td>
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<td>358</td>
<td>343.67</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>252643.13</td>
<td>366</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4. Revised Tested Model: Multiple Regression Analysis Attitudes toward Lesbians and Gays
Further testing of the regression model utilized the single item sexual orientation academic preparation score rather than the entire scale score and is depicted in Figure 5. Results for testing this model to predict attitudes towards lesbians and gay men are presented in Table 7.
Figure 5. Revised Tested Model: Multiple Regression Analysis Attitudes toward Lesbians and Gay Men with single item Sexual Orientation Academic Preparation

Type of student

Sexual Orientation Academic preparation

Personal Experience

Frequency of spiritual activities

Diversity training

Political identification

Attitudes toward Lesbians and Gays
Table 7. Simultaneous Multiple Regression Results: Predicting Attitudes toward Lesbians and Gay Men (N=366) with single item Sexual Orientation Academic Preparation

<table>
<thead>
<tr>
<th></th>
<th>Variance explained</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R$</td>
<td>$RSquare$</td>
<td>Adjusted $R Square$</td>
<td>$Std. Error of the estimate$</td>
</tr>
<tr>
<td></td>
<td>0.719</td>
<td>0.517</td>
<td>0.506</td>
<td>18.46</td>
</tr>
</tbody>
</table>

ANOVA results for Attitudes toward Lesbians and Gay Men

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$ Value</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
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<td>16322.88</td>
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<tr>
<td>Residual</td>
<td>122060.08</td>
<td>358</td>
<td>340.95</td>
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<tr>
<td>Total</td>
<td>252643.13</td>
<td>366</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Regression Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>Std. error</td>
<td>Beta</td>
<td>$t$ Value</td>
</tr>
<tr>
<td>Constant</td>
<td>73.579</td>
<td>7.84</td>
<td>9.39</td>
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<tr>
<td>Political</td>
<td>5.730</td>
<td>0.73</td>
<td>0.341</td>
<td>7.89</td>
</tr>
<tr>
<td>Personal Experience</td>
<td>2.892</td>
<td>0.40</td>
<td>0.302</td>
<td>7.26</td>
</tr>
<tr>
<td>Often Spiritual</td>
<td>-5.424</td>
<td>0.91</td>
<td>-0.234</td>
<td>-5.97</td>
</tr>
<tr>
<td>Dummy Dental</td>
<td>-6.502</td>
<td>3.27</td>
<td>-0.104</td>
<td>-1.99</td>
</tr>
<tr>
<td>Dummy Medical</td>
<td>1.957</td>
<td>2.65</td>
<td>0.033</td>
<td>0.74</td>
</tr>
<tr>
<td>Dummy Nurse</td>
<td>-3.757</td>
<td>3.11</td>
<td>-0.057</td>
<td>-1.21</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Preparation</td>
<td>1.354</td>
<td>0.65</td>
<td>0.083</td>
<td>2.08</td>
</tr>
<tr>
<td>Diversity training</td>
<td>.151</td>
<td>1.18</td>
<td>0.005</td>
<td>0.13</td>
</tr>
</tbody>
</table>
Results for this further testing of the regression model utilizing the single item sexual orientation academic preparation score rather than the entire scale score yielded a slightly increased $R$ value to 0.719 and accounted for 52% of variance in respondent attitudes toward lesbians and gay men. The three statistically significant predictor variables to the $p$ value of $<0.001$ included political affiliation ($\beta= 0.341$), personal experience ($\beta= 0.302$), and frequency of spiritual practice($\beta= -0.234$). The $R^2 = 0.52$ and the significant $F$ value of 47.88 indicates that as a group the predictor variables explain a statistically significant proportion of the variance in attitudes towards lesbians and gay men.

In this model test however, the single item sexual orientation academic preparation ($\beta= 0.083$) was found to be significant to the standard $p$ value of $p<0.05$ while the variable of diversity training ($\beta= 0.005$) was again not found to be a significant predictor of attitudes toward lesbians and gays, so Hypothesis 2 is still not fully not supported.

Personal experience with non-heterosexual orientation was again the second strongest predictor of favorable attitudes toward lesbians and gays in the simultaneous regression utilizing the single item sexual orientation academic preparation score. Individuals reporting that they had more personal experience with non-heterosexual orientation (i.e. had more exposure to lesbian, gay, bisexual, and transgender people) had more positive attitudes toward lesbians and gay men ($\beta=0.302$).

Likewise, frequent spiritual activity was again negatively correlated with favorable attitudes toward lesbians and gays. Respondents who reported they engaged more frequently in spiritual activities ($\beta= -0.234$) had more negative attitudes toward lesbians and gay men.
Once again the strongest predictor variable was political identification ($\beta=0.341$) for attitudes towards lesbians and gay men. Respondents with more liberal political identification had more positive attitudes toward lesbians and gay men.

When utilizing the single item sexual orientation academic preparation score, there was some changes in the variables of student type, medical students ($\beta=0.033$), nursing students ($\beta=-0.057$) were not significant predictor variables, however dental students ($\beta=-0.104$) were found to be significant predictors of attitudes towards lesbians and gay men to the standard $p$ value of $p<0.05$. Meaning that when we consider the scores of the single item sexual orientation academic preparation score rather than the full academic preparation scale, dental students were more likely than the other healthcare students to hold negative attitudes towards lesbians and gay men.

5.3.2.1 Correlation Matrix and variable selection for Support for Lesbian and Gay Human Rights

As revealed by the correlation matrix (Table 5), the relatively low correlations between gender and age and support for lesbian and gay human rights lead to revising the regression model to exclude these variables. Thus a new model for the revised tested regression for support for lesbian and gay human rights in using the full academic preparation scale scores are depicted in Figure 6. Results for testing this model are presented in Table 8. Further testing of the regression model substituted only the single item sexual orientation academic preparation item are depicted in Figure 7 and presented in Table 9.
5.3.3 Multiple Regression Testing Predictors of Support for Lesbian and Gay Human Rights

H6: Academic preparation and diversity training will be positively correlated with higher levels of support for lesbian and gay human rights.

H7: More personal experience with non-heterosexual orientation will be positively correlated with higher levels of support for lesbian and gay human rights.

H8: Frequent spiritual activity will be negatively correlated with higher levels of support for lesbian and gay human rights.

H9. Conservative political identification will be negatively correlated with higher levels of support for lesbian and gay human rights.

H11: Male healthcare students will have lower levels of support for lesbian and gay human rights compared to their female healthcare student peers.

The results of the simultaneous multiple regression analysis for support for lesbian and gay human rights are presented in Table 8. In the first section of the table, the $R$ value of 0.714, $p$ value <0.001 indicates that the combined predictor variables are highly correlated with greater support for lesbian and gay human rights. The three statistically significant predictor variables (political affiliation, personal experience, and frequency of spiritual activities) combined accounted for 51% of variance in respondent attitudes, $R^2 = 0.51$ $p$ value <0.001. The significant $F$ value of 46.18 indicates that as a group the predictor variables explain a significant proportion of the variance for support for lesbian and gay human rights.

Academic preparation ($\beta= 0.054$), and diversity training ($\beta= 0.017$) were not found to be significant predictors to the standard $p$ value of $p<0.001$ in regression testing for support for lesbian and gay human rights, so Hypothesis 6 is not supported.
Political identification was again the strongest predictor variable ($\beta=0.385$). Respondents with more liberal political identification had more support for lesbian and gay human rights. Individuals reporting more personal experience with non-heterosexual orientation were more supportive of lesbian and gay human rights ($\beta=0.286$). Respondents who reported that they engaged in more frequent spiritual activities ($\beta=-0.164$) were less supportive of lesbian and gay human rights. The category of dental students ($\beta=-0.136$) were found to be significant to the p value of $<0.05$ indicating that dental students were less likely to support lesbian and gay human rights that the other healthcare students. The remaining student type variables in the regression testing were not significant predictor variables for support of lesbian and gay human rights. These included nursing students ($\beta=-0.137$) and medical students ($\beta=-0.030$).

Figure 6. Revised Tested Model: Multiple Regression Analysis Support of Lesbian and Gay Human Rights
Table 8. Simultaneous Multiple Regression Results: Predicting Support for Lesbian and Gay Human Rights (N=364)

<table>
<thead>
<tr>
<th>Variance explained</th>
<th>R</th>
<th>RSquare</th>
<th>Adjusted R Square</th>
<th>Std. Error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.714</td>
<td>0.509</td>
<td>0.498</td>
<td>17.81</td>
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</table>

ANOVA results for Support for Lesbian and Gay Human Rights

<table>
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<th>df</th>
<th>Mean Square</th>
<th>F Value</th>
<th>p value</th>
</tr>
</thead>
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<td>14649.24</td>
<td>46.18</td>
</tr>
<tr>
<td>Residual</td>
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<td>Total</td>
<td>230124.49</td>
<td>364</td>
<td></td>
<td></td>
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</table>

Regression Coefficients

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. error</td>
</tr>
<tr>
<td>---</td>
<td>-----------</td>
</tr>
<tr>
<td>Constant</td>
<td>94.693</td>
</tr>
<tr>
<td>Political</td>
<td>6.197</td>
</tr>
<tr>
<td>Personal Experience</td>
<td>2.620</td>
</tr>
<tr>
<td>Dummy Dental</td>
<td>-8.129</td>
</tr>
<tr>
<td>Often Spiritual</td>
<td>-3.638</td>
</tr>
<tr>
<td>Dummy Nurse</td>
<td>-8.691</td>
</tr>
<tr>
<td>Dummy Medical</td>
<td>-1.692</td>
</tr>
<tr>
<td>Diversity training</td>
<td>0.444</td>
</tr>
<tr>
<td>Academic Preparation</td>
<td>.072</td>
</tr>
</tbody>
</table>

The last regression model utilizing the single item sexual orientation academic preparation score as a predictor of support for human rights rather than the entire scale score is
depicted in Figure 7. Results for testing this model to predict support of lesbian and gay human rights are presented in Table 9.

![Figure 7. Revised Tested Model: Multiple Regression Analysis Predicting Support for Lesbian and Gay Human Rights with single item Sexual Orientation Academic Preparation](image)

**Table 9. Simultaneous Multiple Regression Results: Predicting Support for Lesbian and Gay Human Rights (N=364) with single item Sexual Orientation Academic Preparation**

<table>
<thead>
<tr>
<th>Variance explained</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$R$</td>
<td>0.716</td>
<td>0.513</td>
<td>0.502</td>
<td>17.75</td>
</tr>
</tbody>
</table>

**ANOVA results for Support for Lesbian and Gay Human Rights**

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$ Value</th>
<th>$p$ value</th>
</tr>
</thead>
</table>
Results for this further testing of the regression model utilizing the single item sexual orientation academic preparation score rather than the entire scale score yielded a slightly increased $R$ value to 0.716 and accounted for 52% of variance in respondent support of lesbian and gay human rights. The three statistically significant predictor variables to the $p$ value of $<0.001$ included political affiliation ($\beta=0.383$), personal experience ($\beta=0.285$), and frequency of spiritual practice ($\beta=-0.158$). The $R^2 = 0.52$ and the significant $F$ value of 46.83 indicates that as a group the predictor variables explain a statistically significant proportion of the variance in support of lesbian and gay human rights.
In this model test however, the single item sexual orientation academic preparation (β= 0.084) was found to be significant to the standard p value of p<0.05 while the variable of diversity training (β= 0.017) was again not found to be a significant predictor of support of lesbian and gay human rights, so Hypothesis 6 is still not fully not supported.

Personal experience with non-heterosexual orientation was again the second strongest predictor of favorable support of lesbian and gay human rights in the regression testing utilizing the single item sexual orientation academic preparation score. Individuals reporting that they had more personal experience with non-heterosexual orientation (i.e. had more exposure to lesbian, gay, bisexual, and transgender people) reported they were more supportive of lesbian and gay human rights (β=0.285).

Likewise, frequent spiritual activity was again negatively correlated with support of lesbian and gay human rights. Respondents who reported they engaged more frequently in spiritual activities (β= -0.158) were less likely to support of lesbian and gay human rights.

Once again the strongest predictor variable was political identification (β=0.383) for support of lesbian and gay human rights. Respondents with more liberal political identification reported they were more supportive of lesbian and gay human rights.

When utilizing the single item sexual orientation academic preparation score, there were some changes in the variables of student type, medical students (β= -0.037), nursing students (β= -0.127) were not significant predictor variables, however dental students (β= - 0.125) were found to be significant predictors of attitudes towards lesbians and gay men to the standard p value of p<0.05. Meaning that when we consider the scores of the single item sexual orientation academic preparation score rather than the full academic preparation scale, dental students were
more likely than the other healthcare students to not be in support of lesbian and gay human rights.
6.0 DISCUSSION

Generally, the survey respondents were similar to one another in terms of demographic makeup. All were enrolled students at the University of Pittsburgh in professional training programs in one of the healthcare professions. Respondents considered for the study were in their first year of professional training. The majority of respondents identified as heterosexual, and had already obtained at least a bachelor's degree. Most of the respondents were Caucasian and in their 20's. Additionally, the majority of respondents reported that they were affiliated with a Christian religious denomination and most had previous exposure to training on diversity.

The sample size (N=369) and, more importantly, the percentage of students from each participating school provide a baseline of the current healthcare students at the University of Pittsburgh. While these findings ought not be used to make sweeping generalizations nor seen as representative of all healthcare students’ attitudes about lesbians and gays or support for lesbian and gay human rights, it is conceivable that other universities of comparable size and populations as the University of Pittsburgh might find similar patterns and results.

The results from this study show that there are clear differences between the Social Work, Medical, Nursing, and Dental healthcare student groups both in attitudes about lesbians and gays and in support for lesbian and gay human rights. One finding of this study is that social work students scored higher on most of the measures, including academic preparation, personal experiences with non-heterosexual orientation, support for lesbian and gay human rights,
diversity training, than students from other healthcare professions. One unexpected finding that was revealed with the simultaneous regression analysis was that first year medical students scored higher than all other healthcare students on positive attitudes towards lesbians and gays. With the exception of scores on the academic preparation measure, medical students scored consistently higher than the nursing students. Dental students consistently scored the lowest in comparison to the other healthcare students in all measures used in this study.

6.1 ACADEMIC PREPARATION

The fact that social work students scored higher on the measure for academic preparation in this study might be explained by the emphasis on social justice issues within the social work profession, stated goals of the profession, or curriculum differences. However, this finding should not be interpreted to mean that additional effort is not needed within the School of Social Work as well as within the other professional schools involved in this study, to better prepare healthcare students to serve lesbian, gay, bisexual, and transgender individuals. Crucial to interpreting the findings of this study is remembering that all the scores obtained were from self-reported measures. While social work respondents scored an average of 80 for the academic preparation measure, the highest possible score was 105. In other words, even social work students reported that they are not adequately prepared to address a variety of diversity issues by their current academic program and that there is still considerable room across the healthcare professions to improve students’ academic preparation.

Presumably, academic preparation is chiefly what enables students to be competent professionals. One issue to consider is that a student's self-report of academic preparation in the
first year of professional study would likely differ significantly from that of a student nearing the end of his or her academic pursuits. This could be one reason for additional research within these schools. One suggestion would be to conduct a pre/post test distribution at the beginning and end of their academic program to measure what changes, if any, are reported by students regarding academic preparation. Another possible explanation for low student scores on the measure is that the measure itself might not have been worded such that it clearly conveyed the meaning of "academic preparation." Students might value direct experience over classroom content as being crucial to their educational experiences. For example, a social work student might report that s/he received more academic benefit from field experience than from class work. It is possible that a student might not consider the combined effect of classroom experiences and field training as the sum of academic preparation. This might also explain why academic preparation was not a meaningful predictor for this study.

6.2 SEXUAL ORIENTATION ACADEMIC PREPARATION

In addition to using the score of the entire scale of academic preparation in the regression testing models, the single item score reported for sexual orientation was further tested and found to be a significant predictor not only for attitudes towards lesbians and gay men but for support for lesbian and gay human rights. Social work and medical students scored higher than both nursing and dental students on the single item of sexual orientation academic preparation in this study. This might be explained by the emphasis within professions and stated goals of the professions. However, this finding is only based on self reported responses to a single question and additional research would be necessary to better interpret the findings of this study. Social work
respondents scored an average of 5.42, and medical students scored an average of 5.31 for the single item sexual orientation academic preparation score. The highest possible score for this item was 7. Additional research is necessary to determine what effect such a score would have once in professional practice and presumably working with sexual minorities. What is clear from these findings is that both dental students and nursing students are self-reporting that content on lesbian, gays, bisexual, and transgender individuals is sorely lacking in their academic preparation during their first year of study.

6.3 PERSONAL EXPERIENCES WITH NON-HETEROSEXUAL ORIENTATION

The fact that social work students scored higher on the measure for personal experiences with non-heterosexual orientation than did other healthcare students in this study might be explained by efforts of some instructors within the School to invite LGBT guest lecturers or to encourage presentations by organizations, such as the Gay, Lesbian, Straight, Education Network (GLSEN, 2010) from the LGBT community. First year social work respondents scored an average of 9.53 for the personal-experiences measure, yet the highest possible score for this measure was 14, which indicates that there is still room to encourage all the schools involved in the study to explore ways to increase their students' social contact with sexual minorities. Additional research would be required in order to determine whether panel presentations, guest lectures, movies, or school-based LGBT/straight alliances or social clubs would prove effective in increasing social contact and facilitating personal experiences with sexual minorities.

The personal experiences with non-heterosexual orientation measure used in this study was adapted for use from an unpublished scale by Knudsen (2003) for measuring personal
experience with individuals who were mentally ill; it was used because of its reported reliability of $\alpha = .90$. The original questions and format used in Knudson's measure were kept, with the only modification being the substitution of the phrase a person "who is / are LBGT" rather than ending with "a person with a mental illness." For this study, the fact that the experience with non-heterosexual orientation obtained only an adequate Cronbach's $\alpha = .70$ was a bit frustrating.

One explanation may the naïve effort to be more inclusive of capturing a variety of personal experiences with sexual orientation. Data generated from responses asking about lesbians and gay men might differ significantly from data that also asked respondents to consider bisexuals and transgender individuals. Recommendations for future research would be to remain consistent in inquiries by limiting questions to regard only lesbians and gay or by expanding all scales to be inclusive of bisexual and transgender individuals.

6.4 ATTITUDES ABOUT LESBIANS AND GAYS

Political identification, personal experiences with non-heterosexual orientation, and frequency of spiritual activities, were shown to be significant predictors of student attitudes regarding lesbians and gays in this sample. Most disappointing that neither academic preparation nor diversity training was a significant predictor of student attitudes. It is encouraging that social work respondents scored an average of 119 for the personal attitudes toward lesbians and gay men measure, when the highest possible score for this measure was 140. However, first year medical students scored slightly higher on positive attitudes about lesbians and gay men than did all other healthcare students with average scores of 121. One possible explanation might be the ongoing efforts at the School of Medicine to incorporate more information about sexuality and
sexual orientation into the training curriculum. Longitudinal research would be necessary to see if implementation of new content would have an impact on student attitudes. Unlike other students involved in the study, social work students had surveys distributed in the required Diverse Populations class sections, which raised questions about socially desired responses, not only for social work students but other healthcare students as well and whether findings would be similar if distribution took place in other classes. One interesting research project might compare students and faculty or practicing professionals to determine if differences exist between the newest recruits to the profession and those from previous generations. These findings might differ in comparisons between other student samples or between professionals already in practice in other healthcare professions. This measure of personal attitudes toward lesbians and gay men has proven reliable and valid across a number of research studies conducted in the past thirty years. While this study helps to provide a baseline of understanding attitudes about lesbians and gays in the four different student groups with the regression analysis, it does not fully explain all the variables that could contribute to someone holding negative attitudes toward lesbians and gays.

6.5 SUPPORT FOR LESBIAN AND GAY HUMAN RIGHTS

When this study was initiated, Ellis, Kitzinger, & Wilkinson (2002) was the only published study that had attempted to measure support for lesbian and gay human rights. Results from a confirmatory factor analysis in their particular sample of psychology students suggested a three-factor model for the support for lesbian and gay human rights scale that loaded on (a) social and political rights, (b) freedom of expression, and (c) privacy of identity. A more recent study by
Morrison & McDermott (2009) tested the psychometric properties of the support for lesbian and gay human rights measure, replicating the Ellis, Kitzinger, & Wilkinson (2002) study. Their sample consisted of 267 female psychology students from a large Irish University. Morrison and McDermott's findings suggest that a two-factor model consisting of (a) global support for the human rights of sexual minorities and (b) legality of homosexuality was more supported than the three-factor model suggested by Ellis, Kitzinger, & Wilkinson (2002) for the support for lesbian and gay human rights measure. Based on their results, they recommended further research with both male and female respondents in order to clarify both reliability and construct validity for the support for lesbian and gay human rights measure.

For this study, the modification of the Support for Lesbians and Gay Human Rights Scale from the original 4-point scale to a 7-Point scale was made in order to maintain a consistent format for all of the questions used in the survey tool; this design renders impossible a direct comparison between mean support scores obtained by the differing student groups to the previous study by Ellis et al (2002). The original support for lesbian and gay human rights did not report reliability findings in the original study of psychology students. In spite of these limitations, the scale as modified for this study yielded an excellent $\alpha = .945$. Recommendations for future research would be to conduct psychometric testing such as confirmatory factor analysis when expanding use and publication of findings of this scale across differing populations.
Although social work students were more likely than the other future healthcare professionals to report previous diversity training, it is confounding as to why all the social workers did not report previous training, given CSWE accreditation mandates and the nature of the profession. While not all social work students come into an MSW program with a BSW degree, it is plausible to consider that they might come into their program with more previous experience in social work than, say, dental or medical students would have in their chosen fields. With regard to the other healthcare professions, both dental and nursing student scores reflect a need to improve students’ exposure to diversity issues. These findings raise additional questions about how best to incorporate diversity training into existing curricula requirements. Would it be more effective to incorporate a general diversity program that could be used across the healthcare professions, or would each profession need a tailored approach for diversity training?

The United States is undergoing a dramatic social and cultural shift. Recent anti-immigration efforts show how quickly we can become uncomfortable with interacting with people who are different. Such changes challenge the accurate use of such terminology as "majority" and "minority." Historically, identification as a minority implies “other,” “different,” or "abnormal," complete with a social category that denies the individual. Diversity training offers a means to help address social stigma. Diversity training can also address a variety of artificial social divisions within our society that are used to categorize individuals.

Increasingly, lesbian, gay, bisexual, and transgender individuals live their lives openly. The largest cohort of lesbian, gay, bisexual, and transgender elders to have lived their lives openly are, along with others in the baby boomer generation, increasingly in need of medical care providers (Sperber, 2006). Given the historical difficulties and social context of
discrimination and bias against sexual minorities, there are many points along the healthcare service line (from referrals to discharge) that could potentially be problematic for LBGT patients in pursuing additional healthcare if they encounter bias or negative attitudes on the part of a healthcare provider. Additional research is needed to understand if improvements in diversity training while a healthcare student would result in professionals who are comfortable providing care to a diverse population, regardless of that population's sexual orientation, gender, gender expression, or race.

6.7 OTHER IMPORTANT FINDINGS

One contribution to the literature as a result of this study is confirmation that even when used with a different subject population (social work, medical, dental, and nursing students) and a larger sample size (N=369) than the study conducted by Ellis, Kitzinger, & Wilkinson (2002), there is not a clear difference between the measure for personal attitudes toward lesbians and gay men and the measure for support for lesbian and gay human rights.

After running the multiple regression analysis, it was clear that both scales were capturing some of the same predictors, namely political identification, personal experience with non-heterosexual orientation, frequency of spiritual activities, and dental student status. The correlation between the two measures was extremely high: \( r (471) = .902, p < .001 \). This correlation was actually higher than the one reported by Ellis, Kitzinger, & Wilkinson (2002), which was \( r (207) = .878, p < .001 \).

However, there is some support found in this study for variation between the measures in that age was a predictor of attitudes toward lesbians and gay men but was not a predictor for the
measure of support for lesbian and gay human rights. Likewise, nursing-student status and gender were both predictors for the measure of support for lesbian and gay human rights but were not predictors of attitudes toward lesbians and gay men. Why demographic variables like age, gender, or student status should matter in predicting attitudes toward lesbians and gay men or support for lesbian and gay human rights is an interesting question to pursue in future research.

Obviously the measures are closely capturing predictors. What is less clear is the directionality of the prediction. For example, if a person has more positive attitudes toward lesbians and gay men could it be predicted that the respondent would then be more supportive of lesbian and gay human rights? Or does it mean that a person who is more supportive of lesbian and gay human rights (presumably then having a global awareness of the nature of discrimination and oppression) might be more likely to have positive attitudes toward lesbians and gay men?

Given that the findings from this study derive from a larger sample than does either the study by Ellis, Kitzinger, & Wilkinson (2002) or that by Morrison & McDermott (2009), and also from completely different student populations, a follow-up factor analysis study might provide a better understanding of what the support for lesbian and gay human rights measure can contribute to the professional literature.

Religious affiliation reported varied widely since respondents were requested to self-identify rather than to choose from a limited selection of categories. By choosing this format, a surprising total of twenty-seven categories were generated from respondents’ answers. The upside of this is that the data more accurately reflects the diversity of religious affiliation within the sample. The down-side is that the responses obtained proved unwieldy for running statistical
analysis. Because other researchers have found differing effects based on statistical analysis based on different categories, one option is to do an additional follow up study with this data set to examine more closely the correlations to religious categorization.

Attendance at religious services provides limited understanding of the role that religion plays in an individual's life and tells us little in terms of the quality of someone's religious experience. One of the unanticipated issues with only requesting respondents to identify the frequency of their spiritual activities was obtaining eighty-three responses indicating "other." Such a response could mean many things; for example, it could mean they pray 5 times a day or that they only attend spiritual activities for weddings or funerals. Thus, for respondents who indicated "other" there can be no clear understanding of what they meant to convey. Any interpretation of "other" would be speculation since the response meaning is unclear.

6.8 LIMITATIONS

There are strengths and weaknesses to any research that gathers data by way of a survey design. Survey research is a practical way to assess attitudes or opinions about a particular topic from a large sample of individuals. The larger and more representative the sample surveyed, the greater the external validity the study has for any conclusions drawn about the data. Survey methods offer researchers the possibility of collecting large amounts of data in single encounters with participants.

The foremost limitation of this study is that survey distribution was a single episode at the beginning of a professional training program. This design yields only a portion of the information that we should consider for determining student views. The distribution of the
survey tool was planned to include only students in the first year foundation courses within their professional programs. While it is reasonable to assume that first year students had obtained at least a bachelor's level of education (as did 92.4% of the sample), the number of respondents who reported they had already obtained a master's (5.7%) or a doctoral degree (1.1%) could account for some variation within the samples. For example, some individuals could have been returning to the same field of professional practice to obtain an advanced degree, while others might have obtained an advanced degree in a completely unrelated field (such as English or Computer Science). Future studies might try to clarify what academic background a student has obtained prior to enrollment within their current healthcare program.

One limitation not anticipated was how to account for respondents who were full-time or part-time students or whether they had been previously enrolled and taken a leave from their academic programs. Thus if someone was only part-time, they could have identified themselves as "in my second year" yet, according to credits earned, be classified by the School in which s/he was enrolled as a first-year student and thus enrolled in a foundation class. Another possible explanation is s/he truly was in his/her second year, but because of scheduling conflicts, or family responsibilities, etc., had been unable to take the foundation courses in the normal sequence. Future studies may consider how whether part-time students differ from full-time peers within each particular school.

The unintended collection of surveys from respondents in the Medical and Dental school subsets who indicated that they were significantly further along in their respective programs than first-year status led to questions about whether there would be substantial differences found between students at different points within a particular program. Additional analysis of the
dataset could allow for comparisons to be drawn based on the number of years within each particular school.

The survey tool itself was lengthy and that some of the measures were not particularly sensitive. The academic preparation, personal experience with non-heterosexual orientation, and diversity training measures were designed for this study; this in itself limits the available information about reliability and validity. Future studies might consider using stronger or more psychometrically tested measures in trying to address these issues.

Another limitation to this study, is due to the nature of generating responses by self-report. One difficulty in using self-reported measures is that people can under or overestimate their preparedness or skew reports of their own attitudes. A serious limitation to the strength of this study is the issue of perceived social desirability of responses. Respondents might have particular understandings what is expected within their own professions and may try to answer accordingly. One effort to reduce the effect of this was the inclusion measures that had reversed questions dispersed throughout.

There was no objective data (e.g., grades in a particular class) gathered to compare or validate self-reports from students. Such a design in tracking any particular student would encounter other difficulties since it would compromise the confidentiality / anonymity of responses.

Another issue to consider is the challenge in defining concepts such as “level of exposure” and "academic preparation." Several students indicated in their comments at the end of the measure that they were only answering based on their current program. This leads one to ponder whether other students assumed the questions meant their previous academic experiences
prior to their current program. In hindsight, it is clear that this issue should have been clarified for the respondents.

Other issues to consider include such things as balancing other degree requirements, accreditation standards, as well as the receptivity of individual schools to the content and material. For example, the Graduate School for Public Health at the University of Pittsburgh, in a programmatic approach, has recently created the first certificate program in Lesbian, Gay, Bisexual & Transgender Individuals’ Health and Wellness in the United States (University of Pittsburgh, 2010). It is anticipated that, like the Women's Studies certificate, this program will offer cross-registration of classes and attract students from a variety of the health science programs offered at the University. Schools within the University of Pittsburgh vary greatly in terms of being receptive to incorporating lesbian, gay, bisexual, and transgender content into existing curricula. Efforts such as the LBGT Health certificate program are positive steps toward the improvement of educational programs and better preparation of healthcare students to provide services to the lesbian, gay, bisexual, and transgender community.
REFERENCES


Gay and Lesbian Community Center of Pittsburgh, Inc. 210 Grant Street, Pittsburgh, PA 15219.


http://chapters.glsen.org/cgi-bin/iowa/pittsburgh/home.html


People for the American Way (n.d.) A right wing and a prayer: the religious right and your public schools (available from People for the American Way, 2000 M Street, NW, Washington, DC 20036).


INTRODUCTORY STATEMENT TO THE SURVEY

Introductory Statement to be read before the survey is to be distributed

Dear (healthcare) student,

Professionals, who routinely encounter diversity in their practice settings, often find they need more information or training regarding diversity. Little is known about the direct relationship to attitudes regarding diversity and educational preparation for professional practice.

The attached survey measures attitudes on a variety of diversity issues including sexual orientation and human rights. A variety of healthcare students (i.e. nursing, social work, medicine, public health, etc) will be surveyed for their opinions about these issues. If you are willing to participate, please be advised that this survey is anonymous and voluntary.

Information gathered from this survey will be used for research purposes only. This information could have practical curriculum and clinical implications for teaching about diversity in the classroom setting. There are no foreseeable risks associated with this project, nor are there any direct benefits to you. Some people may be sensitive or uncomfortable with some of the questions. You are not obligated to respond to all of the questions. You can skip questions that you find particularly sensitive or uncomfortable for you.
The questionnaire should take 15 minutes to complete. Please return the survey to the person who distributed them after they are completed. If you have any questions regarding the survey you can contact Kathleen Carrick at 412-242-3826 or by email at krc10@pitt.edu.

I sincerely appreciate your cooperation with this project.

Best regards with your studies!

Sincerely,

Kathleen Carrick

Dr. Katie Greeno

Dissertation Chair
SURVEY INSTRUMENT

I. ACADEMIC PREPARATION

A. How well do you feel that your academic experiences have prepared you to address the following issues? (Please circle the response that best reflects your views)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Very Unprepared</th>
<th>Unprepared</th>
<th>Somewhat Unprepared</th>
<th>Neutral</th>
<th>Somewhat Prepared</th>
<th>Prepared</th>
<th>Very Prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Racism</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. Ethnocentrism</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. Classism</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4. Sexism</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. Heterosexism</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6. Agism</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7. Domestic violence</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8. Aging</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9. Abuse and neglect</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10. Sexuality</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11. Elder sexuality</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12. Sexual orientation</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13. Discrimination</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14. Prejudice</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15. Stereotypes</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

16. Would you like to add any comments about your academic preparation: ____________________________

II. PERSONAL EXPERIENCES WITH SEXUAL ORIENTATION

B. The following questions are related to sexual orientation. The terms lesbian, gay, bisexual, and transgender will be abbreviated in the questions as LBGT. (Please check the response that best reflects your personal experiences for each item)

17. I have known a person who is LBGT. ................................................... □ Yes □ No
18. There are members in my household who are LBGT........................................ □ Yes □ No
19. I have worked with a person who is LBGT ............................................... □ Yes □ No
20. I have volunteered in a place with a person who is LBGT ............................. □ Yes □ No
21. I have friends who are LBGT ........................................................................ □ Yes □ No
22. I have watched a television show featuring people who are LBGT .................. □ Yes □ No
23. I have watched a movie featuring people who are LBGT ................................ □ Yes □ No
24. I have watched a news program featuring people who are LBGT .................... □ Yes □ No
25. I have read a newspaper or magazine article about people who are LBGT ....... □ Yes □ No
26. I have read a scientific journal article about people who are LBGT .............. □ Yes □ No
27. I have read a book about people who are LBGT .......................................... □ Yes □ No
28. I have learned about people who are LBGT from a college course ................ □ Yes □ No
29. I have a relative who is LBGT ...................................................................... □ Yes □ No
30. I have a neighbor who is LBGT .................................................................... □ Yes □ No

31. Would you like to add any comments about sexual orientation: ________________________________

__________________________________________
### III. PERSONAL ATTITUDES ABOUT SEXUAL ORIENTATION

C. The following questions are related to attitudes about sexual orientation. (Please read the statement and circle the response that best reflects your personal experiences for each item)

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Lesbians just can’t fit into our society</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>33</td>
<td>Male homosexual couples should be allowed to adopt children the same as heterosexual couples.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>34</td>
<td>State laws regulating private, consenting lesbian behavior should be loosened</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>35</td>
<td>I think male homosexuals are disgusting</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>36</td>
<td>A woman’s homosexuality should not be a cause for job discrimination in any situation</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>37</td>
<td>Male homosexuals should not be allowed to teach school</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>38</td>
<td>Female homosexuality is detrimental to society because it breaks down the natural division between the sexes</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>39</td>
<td>Male homosexuality is a perversion</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>40</td>
<td>Female homosexuality is a sin</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>41</td>
<td>Just as in other species, male homosexuality is a natural expression of sexuality in human men</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>42</td>
<td>The growing number of lesbians indicates a decline in American morals</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>43</td>
<td>If a man has homosexual feelings, he should do everything he can to overcome them</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>44</td>
<td>Female homosexuality is a threat to many of our basic social institutions</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
45. Female homosexuality itself is not a problem, but what society makes of it can be a problem

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

46. I would not be too upset if I learned that my son is a homosexual.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>3</td>
<td>4</td>
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<td>6</td>
</tr>
</tbody>
</table>

47. Homosexual behavior between two men is just plain wrong

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

48. Female homosexuality is an inferior form of sexuality

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

49. The idea of male homosexual marriages seems ridiculous to me

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

50. Lesbians are sick

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

51. Male homosexuality is merely a different kind of lifestyle that should not be condemned

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

52. Would you like to add any comments about sexual orientation:

________________________________________________________________________
________________________________________________________________________

D. The following questions are related to attitudes about human rights and sexual orientation.
(Please read the statement and circle the response that best reflects your personal experiences for each item)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
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<tr>
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</table>

53. Lesbians and gay couples should have all the same parenting rights as heterosexuals do (i.e. adoption, fostering, & access to fertility services)

54. Society has the right to prevent lesbians and gay men who want to speak in schools from actively promoting their homosexuality as equivalent to heterosexuality

55. Lesbians and gay male couples should be legally permitted to marry, just as heterosexual couples

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td></td>
<td>Strongly Disagree</td>
<td>Somewhat Disagree</td>
<td>Somewhat Agree</td>
<td>Agree</td>
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<tr>
<td>56. It should be acceptable for lesbians and gay male couples openly to express their affection for their partners without fear of harassment or violence</td>
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<tr>
<td>57. The age at which male homosexual sex is considered legal should be the same as that for heterosexual sex</td>
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<tr>
<td>58. Just like people persecuted for their religious and political beliefs, lesbians and gay men should be granted asylum in another country when homosexuality is persecuted in their own</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>59. The partner of a lesbian or gay man should be entitled to the same immigration rights (i.e. permanent resident status or citizenship) as is a partner of a heterosexual man or woman</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>60. All university curriculum in fields such as social psychology, education, history, literature, and health studies should explicitly include lesbian and gay male perspectives</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>61. All employers should strive to develop just and favorable conditions in the workplace for lesbians and gay men</td>
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<tr>
<td>62. It is not appropriate for lesbians and gay men to serve in the armed forces</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>63. The partner of a lesbian or gay male employee should be entitled to the same spousal benefits (i.e. parental leave, insurance coverage, travel benefits, pension rights) as a married partner of a heterosexual employee</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Agree</td>
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<tr>
<td>64. Children should be taught respect for the rights of lesbians and gay men</td>
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<tr>
<td>65. A person's sexual orientation should not block that person's access to basic rights and freedoms</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>66. Lesbianism and gay male homosexuality should be listed in policies &amp; legislation as protected from discrimination, the same way as race, class, sex, and religion</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>67. No one, in any country of the world should be arrested, detained, or exiled simply for being lesbian or gay</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>68. Lesbians and gay men should only be allowed to express their views as long as they don't offend or upset the majority</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>69. If it is discovered that a primary school teacher is lesbian or gay, s/he should not be allowed to continue teaching</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>70. Lesbians and gay men should not have the right to flaunt their sexuality in public at marches &amp; demonstrations</td>
<td>0........1........2........3........4........5........6</td>
<td></td>
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</tr>
<tr>
<td>71. A country should have the right to impose the death penalty on lesbians and gay men if that is consistent with that culture's values and beliefs</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>72. Lesbians and gay men should not be fined or arrested for engaging in consenting sexual acts of whatever nature (i.e. anal intercourse or sadomasochism) in their own homes</td>
<td>0........1........2........3........4........5........6</td>
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<tr>
<td>73. For the most part, policies which guarantee equal rights to lesbians and gay men in such matters as jobs and housing damage society's moral standards</td>
<td>0........1........2........3........4........5........6</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>Somewhat Agree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Disagree</td>
</tr>
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<tr>
<td>74.</td>
<td>There is never a situation in which someone’s homosexuality should be a cause for job discrimination</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>4</td>
</tr>
<tr>
<td>75.</td>
<td>It is ok for a newspaper or organization to publicize that a person is gay or lesbian without that person's consent</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>4</td>
</tr>
<tr>
<td>76.</td>
<td>A man’s homosexuality or a woman’s lesbianism should not be raised as an issue in a court of law, unless the case under consideration directly relates to homosexual acts.</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>77.</td>
<td>Would you like to add any comments about human rights and sexual orientation:</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**IV. DEMOGRAPHICS**

E. The year you were born: ____________

F. How would you identify your primary ethnicity?
   1. [ ] Caucasian/White/European
   2. [ ] African American/Black
   3. [ ] Hispanic/Latino
   4. [ ] Native American/American Indian
   5. [ ] Multiracial
   6. [ ] Asian/Pacific Islander
   7. [ ] Other (please specify) __________________________

G. How would you identify your primary religious affiliation?
   (please specify) __________________________

H. How often do you engage in spiritual activities?
   1. [ ] Daily
   2. [ ] Weekly
   3. [ ] Monthly
   4. [ ] Yearly
   5. [ ] Other (please specify) __________________________

I. What is the highest level of education you have completed?
   1. [ ] High School Diploma
   2. [ ] Associate’s degree
   3. [ ] Bachelor’s Degree
   4. [ ] Master’s Degree
   5. [ ] Doctoral Degree
J. What level are you in your college program?
   1. □ First year in college/program
   2. □ Second year in college/program
   3. □ Third year in college/program
   4. □ Fourth year in college/program

K. I have taken a college level course on diversity □ 1. YES □ 2. NO □ 3. Not Sure

L. Some of my college courses have mentioned diversity □ 1. YES □ 2. NO □ 3. Not Sure

M. I have participated in a diversity workshop/training □ 1. YES □ 2. NO □ 3. Not Sure

N. How many years of healthcare experience do you have? _______________________

O. Total household income before taxes or any other deductions last year?
   □ 1. Under $10,000 □ 5. $26,000-$30,000 □ 9. $46,000-$50,000
   □ 2. $10,000-$15,000 □ 6. $31,000-$35,000 □ 10. $51,000-$60,000
   □ 3. $16,000-$20,000 □ 7. $36,000-$40,000 □ 11. $61,000-$70,000
   □ 4. $21,000-$25,000 □ 8. $41,000-$45,000 □ 12. $71,000 or above

P. Please circle what best describes your usual stand on political issues.


R. How would you identify your sexual orientation?

S. How would you identify your relationship status?

Thank you for taking the time to complete this survey!
APPENDIX B

NASW CODE OF ETHICS

The *NASW Code of Ethics* serves six purposes:

1. The *Code* identifies core values on which social work's mission is based.
2. The *Code* summarizes broad ethical principles that reflect the profession's core values and establishes a set of specific ethical standards that should be used to guide social work practice.
3. The *Code* is designed to help social workers identify relevant considerations when professional obligations conflict or ethical uncertainties arise.
4. The *Code* provides ethical standards to which the general public can hold the social work profession accountable.
5. The *Code* socializes practitioners new to the field to social work's mission, values, ethical principles, and ethical standards.
6. The *Code* articulates standards that the social work profession itself can use to assess whether social workers have engaged in unethical conduct. NASW has formal procedures to adjudicate ethics complaints filed against its members.* In subscribing to this *Code*, social workers are required to cooperate in its implementation, participate in NASW adjudication proceedings, and abide by any NASW disciplinary rulings or sanctions based on it.

AMA CODE OF ETHICS

The medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a member of this profession, a physician must recognize responsibility to patients first and foremost, as well as to society, to other health professionals, and to self. The following Principles adopted by the American Medical Association are not laws, but standards of conduct which define the essentials of honorable behavior for the physician.

Principles of medical ethics

I. A physician shall be dedicated to providing competent medical care, with compassion and respect for human dignity and rights.

II. A physician shall uphold the standards of professionalism, be honest in all professional interactions, and strive to report physicians deficient in character or competence, or engaging in fraud or deception, to appropriate entities.

III. A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient.

IV. A physician shall respect the rights of patients, colleagues, and other health professionals, and shall safeguard patient confidences and privacy within the constraints of the law.

V. A physician shall continue to study, apply, and advance scientific knowledge, maintain a commitment to medical education, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.

VI. A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical care.

VII. A physician shall recognize a responsibility to participate in activities contributing to the improvement of the community and the betterment of public health.

VIII. A physician shall, while caring for a patient, regard responsibility to the patient as paramount.
IX. A physician shall support access to medical care for all people.

Adopted by the AMA's House of Delegates June 17, 2001.


AMERICAN DENTAL ASSOCIATION CODE OF ETHICS

Preamble

The American Dental Association calls upon dentists to follow high ethical standards which have the benefit of the patient as their primary goal. Recognition of this goal, and of the education and training of a dentist, has resulted in society affording to the profession the privilege and obligation of self-government.

The Association believes that dentists should possess not only knowledge, skill and technical competence but also those traits of character that foster adherence to ethical principles. Qualities of compassion, kindness, integrity, fairness and charity complement the ethical practice of dentistry and help to define the true professional.

The ethical dentist strives to do that which is right and good. The ADA Code is an instrument to help the dentist in this quest.

The Code of Professional Conduct is organized into five sections. Each section falls under the Principle of Ethics that predominately applies to it. Advisory Opinions follow the section of the Code that they interpret.

SECTION 1 – PRINCIPLE: PATIENT AUTONOMY ("self-governance")

SECTION 2 – PRINCIPLE: NONMALEFICENCE ("do no harm")

SECTION 3 – PRINCIPLE: BENEFICENCE ("do good")
SECTION 4 – PRINCIPLE: JUSTICE ("fairness")

SECTION 5 – PRINCIPLE: VERACITY ("truthfulness")

* A full electronic version of this document complete with advisory opinions are available at www.ada.org


NURSING CODE OF ETHICS

The ANA House of Delegates approved these nine provisions of the new Code of Ethics for Nurses at its June 30, 2001 meeting in Washington, DC. In July, 2001, the Congress of Nursing Practice and Economics voted to accept the new language of the interpretive statements resulting in a fully approved revised Code of Ethics for Nurses With Interpretive Statements.

1. The nurse, in all professional relationships, practices with compassion and respect for the inherent dignity, worth and uniqueness of every individual, unrestricted by considerations of social or economic status, personal attributes, or the nature of health problems.

2. The nurse's primary commitment is to the patient, whether an individual, family, group, or community.

3. The nurse promotes, advocates for, and strives to protect the health, safety, and rights of the patient.

4. The nurse is responsible and accountable for individual nursing practice and determines the appropriate delegation of tasks consistent with the nurse's obligation to provide optimum patient care.
5. The nurse owes the same duties to self as to others, including the responsibility to preserve integrity and safety, to maintain competence, and to continue personal and professional growth.

6. The nurse participates in establishing, maintaining, and improving healthcare environments and conditions of employment conducive to the provision of quality healthcare and consistent with the values of the profession through individual and collective action.

7. The nurse participates in the advancement of the profession through contributions to practice, education, administration, and knowledge development.

8. The nurse collaborates with other health professionals and the public in promoting community, national, and international efforts to meet health needs.

9. The profession of nursing, as represented by associations and their members, is responsible for articulating nursing values, for maintaining the integrity of the profession and its practice, and for shaping social policy.

   American Nurses Association, *Code of Ethics for Nurses with Interpretive Statements*,


APPENDIX C

PRIMARY RELIGIOUS AFFILIATION REPORTED BY RESPONDENTS

<table>
<thead>
<tr>
<th>Primary Religious Affiliation</th>
<th>Number of Respondents</th>
<th>Percentage</th>
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<tr>
<td>Not identified</td>
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<td>7.0%</td>
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<tr>
<td>No Religious Preference</td>
<td>39</td>
<td>11.4%</td>
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<tr>
<td>Agnostic</td>
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<td>Protestant</td>
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<tr>
<td>Pagan</td>
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<td>0.3%</td>
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<tr>
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