

KNOWLEDGE AND ATTITUDES OF PRESERVICE TEACHERS TOWARDS
STUDENTS WHO ARE GAY, LESBIAN, BISEXUAL, OR TRANSGENDERED

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The study used a survey design to ascertain the levels of knowledge and attitudes of special education and non-special education preservice and inservice teachers towards students with different sexual orientations. The results of this study are based on 408 responses from preservice and inservice teachers enrolled at seven institutions of higher education within North Carolina, Virginia, and the District of Columbia offering teacher training programs in regular and/or special education.

Two previously developed instruments were used to measure dependent variables in this study. Koch's modified version of The Knowledge about Homosexuality Questionnaire developed by Harris, Nightengale & Owen was used to measure the dependent variable of the preservice and inservice teacher's knowledge about homosexuality. Herek's Attitudes Toward Lesbians and Gay Men (ATLG) measured the dependent variable of attitudes towards homosexuals. The study found no significant differences reported mean scores for knowledge or attitude of homosexuality among the teacher groups surveyed: (a) special education preservice teachers, (b) non-special education preservice teachers, (c) special education inservice teachers, and (d) non-special education

inservice teachers. Neither gender nor age were found to be factors in measures of knowledge or attitude of preservice or inservice teachers.

Receiving prior instruction in serving the needs of GLBT students, or with a focus on GLBT issues, contributed to higher levels of knowledge and more positive attitudes.

This research identified current levels of knowledge and attitudes of preservice and inservice teachers towards GLBT youth, and this information may help outline areas of possible changes necessary in teacher preparation programs, research, and policy.

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CHAPTER 1

INTRODUCTION TO THE STUDY

In April 1997, the Delegate Assembly of the Council for Exceptional Children (CEC; CEC, 1999) passed a resolution supporting human rights for students regardless of race, national origin, religion, age, gender, sexual orientation, or disability. CEC is the largest professional organization of special educators, representing over 50,000 professionals throughout the United States and Canada. Within the resolution, CEC encouraged its members to work in their schools, districts, and communities throughout the continent to support local initiatives whose aim was to assure a safe learning environment and the affirmation of the human rights of all students.

In June of 2001, the American Federation of Teachers (AFT) and the National Education Association (NEA), together representing more than 3.6 million teachers, joined in a call for the Department of Education to protect gay, lesbian, bisexual and transgendered (GLBT) students from human right abuses (GLSEN, 2001a). The call asked Secretary of Education, Rod Paige, to take immediate action to prevent anti-gay harassment and violence in schools.

The challenges faced by GLBT youth in the school setting came to the forefront of literature in the 1980's (Gibson, 1989; Hetrick & Martin, 1987; Martin & Hetrick, 1988; Remafedi, 1987a, 1987b). The ramifications of these challenges for school districts and school administrators were understood in a

federal appellate court case which involved a gay student, Jamie Nabozny (Nabozny v. Podlesny, Davis, Blauert, & Ashland Public School District, 1996). He sued his school district and school administrators for failing to provide equal protection while he attended school; in his suit, he documented long term in-school abuse and neglect by both students and faculty and was awarded nearly \$1 million in damages, which gained the attention of superintendents and principals across the nation. However, research indicates school administrators fear that conservative community members will view schools as promoting homosexuality (Anthanasas, 1996) if they appropriately address gay and lesbian issues (Robinson, 1994). These self-limiting attitudes push student safety aside and make schools unsafe places for GLBT students (Johnson, 1999). Additionally, in the past few years, many GLBT youth who are open about their sexuality at school are challenging anti-gay prejudice and asking for an inclusion of a gay and lesbian curriculum (Berstein & Silberman, 1996).

One of the major functions of schools as institutions is to assist in the child's growth into an independent social individual. Part of this is the development of a sense of self. Development of self, which begins during infancy, includes not only innate aspects, but also an understanding of social roles. Adolescence involves the growth of identity, particularly in the realm of social roles (Uribe & Harbeck, 1992).

An estimated four to ten percent of America's 29 million adolescents are GLBT (Janus & Janus , 1993; Kinsey, Pomeroy, & Martin, 1948, 1953; Klein, 1978; Michael, Gagnon, Laumann, & Kolata, 1994). For the adolescent who is

GLBT, such growth of independence includes the realization that the child is a member of a stigmatized minority group; this realization often leads to isolation and depression. Hetrick and Martin, (1987), found that eighty percent of GLBT youth report severe isolation and depression problems, compared with fifteen to forty percent of adolescents in the general population (Kolvin & Sadowski, 2001). They have no one to talk to, feel distanced from family and peers, and have little access to good information. This isolation and depression contributes to the fact that GLBT youth account for twenty-eight percent of high school dropouts (Gibson, 1989) and may comprise up to thirty percent of completed youth suicides annually (Fergusson, Horwood, & Beautrais, 1999; Gibson, 1989; McDaniel, Purcell, & D'Augelli, 2001; Schaffer, Fischer, Parides, Hicks & Gould, 1995). Many gay youth experience a strong negative response from their parents for whom the discovery that their child is a homosexual feels like death (Johnson, 1996). With this, the GLBT youth's sense of isolation increases and many become runaways or "throwaways", further adding to the already present high risk of suicide (Johnson, 1999).

Studies also indicate that gay and lesbian youth are three to seven times more likely to attempt suicide than other young people (Gibson, 1989; Hetrick & Martin, 1987; Remafedi, 1987a, 1999; Remafedi, Farrow, & Deisher, 1991). In the Youth Risk Behavior Surveys (YRBS), initiated by the Centers for Disease Control (CDC; 1995) in 39 states, significant differences were found between attempted suicides by GLBT youth and their heterosexual classmates. In Massachusetts, for example, a survey of 4,159 students indicated that thirty-six

percent of GLBT youth had attempted suicide in the past year compared to nine percent of the non-GLBT youth. Vermont's findings in the study were similar with thirty-eight percent for GLBT youth versus fourteen percent for non-GLBT youth. Garofalo, Wolf, Kessel, Palfrey, & DuRant, (1998) reported similar findings among self-identified GLBT teens. The GLBT sample respondents indicated that more than one third had attempted suicide, while only five percent of heterosexual teens reported suicide attempts.

The process alone of understanding one's sexuality is frightening since GLBT youth are denied access to information in school about human sexuality and alternative lifestyles. This is in part due to the belief by some that merely having this information could cause young people to become homosexual or bisexual (Harbeck, 1992).

The developmental process is further complicated by the isolation of the GLBT youth. While most members of minority groups, whether ethnic, national origin, religious, racial, or gender related, usually have the support and enculturation of family and community members, a GLBT youth is often alone in this process of exploration and identification. In fact, most quickly come to realize that the mere expression of sexual confusion or same-sex attraction can cause intense parental and peer hostility and/or rejection. Half of all lesbian and gay youth interviewed in a 1987 study report that their parents have rejected them due to their sexual orientation (Remafedi, 1987a). GLBT youth who are subjected to violence and harassment may end up living on the street in disproportionate numbers, often being forced out of their homes or the foster

care systems after their sexual orientation is discovered (Greenblatt & Robertson, 1993; Mallon, 1998; National Network of Runaway and Youth Services, 1991). In a study of inner-city homeless youth aged eleven to twenty-three, one quarter reported they were GLBT (Busen & Beech, 1997). According to the U.S. Department of Health and Human Services, twenty-six percent of young gays and lesbians were forced to leave home because of conflicts over their sexual orientation (Gibson, 1989). GLBT youth have a greater likelihood of running away from home due to family conflicts and half of the gay youth who have run away engage in prostitution to support themselves (Besner & Spungin, 1995). Thus, while many minority groups are the target for prejudice and discrimination in our society, few face this hostility without the support and acceptance of family as do many GLBT youth.

In addition to suicide attempts, this rejection of family and peers often leads to drug or alcohol abuse. Researchers Rosario, Hunter and Rotheram-Borus reported in a 1992 study by the New York State Psychiatric Institute that sixty-eight percent of gay male adolescents reported alcohol use and forty-four percent reported drug use. Among adolescent lesbians, eighty-three percent had used alcohol, fifty-six percent had used illicit drugs, and eleven percent had used crack/cocaine in the three months preceding the study. In a Seattle study, thirty-six percent of GLBT youth compared to twenty-two percent of heterosexual youth reported engaging in high risk or heavy drug use (Safe Schools Coalition of Washington (SSCW; 1999).

GLBT youth report that they endured a wide range of verbal and physical

abuse in schools from other students and even from teachers (Governor's Commission, 1993). This abuse varied from derogatory slurs to violent beatings. School for these youth is far from being a safe place, and there is evidence of educators actually participating in the harassment and abuse of students with different sexual orientations (Pilkington & D'Augelli, 1995). A study by the Gay, Lesbian, and Straight Education Network (GLSEN, 1999) measured the frequency of anti-gay harassment in schools and found that sixty-one percent of GLBT students reported verbal harassment, forty-six percent reported sexual harassment, twenty-seven percent reported physical harassment, and thirteen percent reported being physically assaulted. Comparison reports focusing on the issue of school victimization show that ten percent of school aged youth as a whole report being assaulted, and seventeen percent physically harassed (Kaufman et al. 1998). Over half of the respondents stated that this harassment occurred on a daily basis. Findings in the YRBS (CDC, 1995) indicated that significant differences existed between violence and harassment suffered by GLBT youth in schools and their heterosexual classmates. The previously mentioned Massachusetts survey, for example, found that almost sixty-seven percent of GLBT youth reported being threatened or injured with a weapon in school during the past year as compared with twenty-nine percent of their non-GLBT classmates. Vermont's findings in the study were similar, with thirty-four percent likened to eight percent, while researchers in Washington state found lower percentages of violence with eighteen percent reported by GLBT youth in school in comparison to ten percent.

A survey of 2,074 gay adults, conducted by the National Gay and Lesbian Task Force in 1987, found that forty-five percent of the males and twenty percent of the females reported having experienced verbal or physical assaults in secondary school because they were perceived to be gay or lesbian. A study by the Gay, Lesbian, and Straight Education Network (GLSEN, 1999) found that ninety percent of gay and lesbian youth reported anti-gay epithets in school, thirty-six percent heard remarks from staff and faculty, and thirty-nine percent reported that no one intervened. "Schools do not adequately protect gay youth, with teachers often reluctant to stop harassment or rebut homophobic remarks" (Gibson, 1989, p. 128). GLSEN (1999) reported that other students were more likely to challenge homophobic remarks in school than were faculty members. Eighty-two percent reported that when interventions occurred they were by fellow students, while only sixty-six percent reported a faculty member actually intervened. Teachers who wish to stop harassment and anti-gay comments may lack the backing of administration; another reason is that few teachers have had specific training which would provide them with effective means of intervention, and many fear retaliation (Gibson, 1989). The stigma of homosexuality inhibits the inclusion of GLBT issues in the curriculum, prevents the formation of GLBT support groups in school and ignores the problems faced by GLBT youth and those struggling with questions of sexual orientation (Johnson, 1999). A recent survey of school districts in Ohio found that no districts were attacking GLBT issues to a significant degree (Schleis & Hone-McMahan, 1998). Consequently, GLBT youth-bashing continues in our schools. The harassment and violence

encountered by many GLBT students in school interferes with their right to a safe and complete education; this threatening school environment can be a contributing factor to suicide, attempted suicide, and/or dropping out of school by our Nation's GLBT youth. Violence against gay and lesbian students in school is part of an increasing incidence of violence against gays and lesbians in the world at large (Governor's Commission, 1993).

Additionally, research by James Sears of the University of South Carolina showed that eight out of ten teachers in training harbored anti-gay attitudes (Sears, 1989). Surveys indicate that educators feel sexual orientation has no place in the classroom and has nothing to do with student performance (Bailey, 1996; Bliss & Harris, 1999).

These anti-gay attitudes most definitely impact youth with different sexual orientations in America's schools in a negative manner. One of the greatest obstacles which affect GLBT students negatively is the lack of training for educators who are ready and willing to look beyond homophobia (Johnson, 1999). Most educators desire to be part of the solution, rather than part of the problem for GLBT youth, but many are hampered by this lack of training about these issues because they are considered taboo. For these individuals, ignorance, not indifference, is the obstacle to effective change (Ross, 1987).

Purpose of the Study

The purpose of this study was to survey both special education and non-special education preservice and inservice teachers to ascertain their knowledge and attitudes towards students with different sexual orientations. The survey

instruments used in this investigation were: The Knowledge about Homosexuality Questionnaire developed by Harris, Nightengale & Owen (1995), which measured knowledge about homosexuality; and Herek's (1988) Attitudes Toward Lesbians and Gay Men, which was used to measure attitudes towards homosexuals. The results are based 408 responses from preservice and inservice teachers enrolled at seven institutions of higher education within North Carolina, Virginia, and the District of Columbia that offer teacher training. The study provided insight into the attitudes and beliefs preservice and inservice teachers hold toward homosexuality, and raised questions about curricula regarding support for GLBT youth in teacher preparation programs.

Significance of the Study

With research indicating the difficulties that GLBT students face in today's school settings, as well as the anti-gay attitudes of teachers and administrators, there is importance in examining teacher training programs to determine what levels of homophobia currently exist in preservice and inservice teachers, so changes can be proposed and implemented to meet the challenges facing today's GLBT youth. This research identified current levels of knowledge and attitudes of preservice and inservice teachers towards GLBT youth, and this information may help outline areas of possible changes necessary in teacher preparation programs.

Limitations of the Study

Research can only be generalized to the extent that the sample characteristics are representative of the characteristics found in the population in

question. To the extent that this research study differs from national or state populations of special education and non-special education preservice and inservice teachers, discretion should be exercised when interpreting the results of this study.

Results from the participants of this study were based on self-report information; the researcher acknowledges that issues surrounding GLBT youth are areas which often cause discomfort to professionals (Butler, 1995; Koch, 2000; Schleis & Hone-McMahan, 1998), resulting in some respondents being unwilling to provide information or giving responses which were not necessarily representative of their own attitudes and knowledge. The data is representative only of the individuals who choose to participate in the study, and does not examine the beliefs or knowledge of those who do not.

The study sample was selected from institutions of higher learning offering teacher preparation programs in North Carolina, Virginia, and the District of Columbia and may not be generalized to all preservice and inservice teachers in other states or outside of the participating colleges and universities. Participation of faculty members from the institutions of higher learning offering teacher preparation programs in the Mid-Atlantic region was completely voluntary. Department chairs or deans left the decision of allowing access to students for the study up to individual professors or instructors. Therefore, the study reflected attitudes and knowledge of respondents only in courses allowing the researcher access, and not to the teacher preparation program as a whole.

Definitions of Terms

Bisexual: A male or female whose sexual attraction to, and/or behavior with, applies toward both males and females (Human Rights Watch, 2001).

GLBT: A common abbreviation for an individual who is either gay, lesbian, bisexual or transgendered (Human Rights Watch, 2001).

Gay: One who is attracted to a person of the same sex. This term is sometimes used to refer only to males who are attracted to other males, but may also be used as a synonym for the more clinical term homosexual (Human Rights Watch, 2001). For the purposes of this study, it will refer to a male homosexual whose primary sexual orientation is toward other males.

Homophobia: A fear or hatred of homosexuality, bisexuality or toward those who are transgendered; this may be expressed in prejudice, discrimination, stigmatization, harassment, or acts of violence brought on by fear and hatred; may also be internalized as self-hatred (American Academy of Pediatrics, 1993). Homophobia is described in terms of four very distinct but interrelated levels: personal, interpersonal, institutional, and cultural (Blumenfeld, 1992).

Personal homophobia refers to one's personal beliefs about sexual minorities.

Interpersonal homophobia refers to specific behaviors which are manifested when a personal bias or prejudice affects relations among individuals, transforming prejudice into its active component; discrimination. Examples of interpersonal homophobia

include harassment, both verbal and physical; name calling; intimidation; and discrimination in work or housing.

Institutional homophobia is the way in which institutions discriminate on the basis of sexual orientation; this type of discrimination is often enforced by existing laws and policies.

Cultural homophobia is defined as social norms or codes of behavior which, although not expressly written into law or policy, work within a society to legitimize oppression. According to Blumenfeld (1992), this type of homophobia can include seven categories: conspiracy to silence, denial of culture, denial of popular strength, fear of overvisibility, creation of defined public spaces, denial of self labeling, and negative stereotyping.

Homosexuality: A clinical term used to describe people whose primary sexual attraction to, and/or behavior with, is toward members of the same gender/sex (Maddux, 1988).

Lesbian: A female who is attracted toward other females (Human Rights Watch, 2001).

Sexual Orientation: The persistent pattern of physical and/or emotional attraction to members of the same or opposite sex (American Academy of Pediatrics, 1993).

Transgendered: An individual who believes himself or herself to be of a gender which is different from his or her biologic gender (American Academy of Pediatrics, 1993).

CHAPTER 2

LITERATURE REVIEW

Sources cited in this review of the literature were obtained through a series of activities. Initial procedures began with an examination of the Currents Index to Journals in Education (CIJE), which was searched for references to journal articles pertaining to preservice teachers, gay youth, lesbian youth, bisexual youth, transgendered youth, teen suicide, homophobia, homosexual, teacher attitudes, and youth at risk. Next, a review of Dissertation Abstracts International (DAI) revealed a few studies concerning preservice teacher's attitudes, knowledge, and beliefs toward GLBT youth completed during the years 1985 through 2002. In addition, the Educational Resources Information Center (ERIC) databases for the years 1930 through 2001 and the PsychLIT and Academic Abstract databases for years 1940 through 2001 were searched. Descriptors for these searches included preservice teachers, gay youth, lesbian youth, bisexual youth, transgendered youth, teen suicide, homophobia, homosexual, teacher attitudes, assessment scales, and youth isolation and stigmatization. Finally, published texts and monographs pertaining to GLBT youth, preservice training, GLBT issues in education, and multi-cultural curriculum were also reviewed.

Importance of Teacher Knowledge of GLBT Issues

Boler (1999) states that GLBT rights and equity issues are more unstable

topics in present-day classrooms than race. Most public schools do not celebrate lesbian and gay pride history month, and for those becoming teachers, these issues are a “Pandora’s Box” and viewed as a private matter not open for discussion. On the other hand, she also states that race, gender and social class are viewed as practicable topics for public educational discussions, where as GLBT issues are not. In most schools, the curriculum is silent and fails to give accurate information about sexual development, lesbian and gay contributions to history, or oppression based on sexuality (Cook, 1991).

With estimates of the number of GLBT youth in the United States ranging from one percent to just under nine percent, with best estimates putting the percentage between five and six percent of the total population (Human Rights Watch, 2001), and with one in four persons in the United states having a family member who is homosexual (Cwayna, Remafedi & Treadway, 1991), it is important that teachers understand the basic information relating to homosexuality. Adding to this importance is the fact that there are 6 to 10 million children in gay and lesbian families in this country (American Bar Association, 1987; Patterson, 1992), and a greater visibility of gay headed households which is due, in part, to a social and political movement in the lesbian and gay communities (Wickens, 1993). With close connections between school and home being viewed by teachers as central to their work (Casper, Schultz, & Wickens, 1992), a need to recognize the importance of understanding cultural and family backgrounds exists for the students they teach.

In 1973, the American Psychiatric Association reclassified homosexuality

as a sexual orientation/expression rather than as a mental disorder (American Psychological Association, 1974); GLBT youth, however, remain an invisible population in that many do not share their sexual orientation with family, friends, or peers due to fear of rejection and violence (Fine, 1988; Hunter, 1990; McIntyre, 1992). These fears of loss, as well as exposure to harassment, discrimination, and violence play an important role in an individual's fear about self-identifying as GLBT (Haldeman, 1994). Peers may engage in cruel name calling, ostracize, and even physically abuse an identified GLBT youth. School and other community figures may ridicule or taunt, or simply fail to provide support. This rejection may lead to isolation, runaway behavior, homelessness, domestic violence, depression, suicide, drug and/or alcohol abuse, and school failure. Additionally, awareness of a youth's sexual identity may create a family crisis which can result in the expulsion of a GLBT youth from home, rejection by parents and siblings, parental guilt and/or conflicts within the parents relationship (Cramer & Roach, 1988; Griffin, Wirth, & Wirth, 1996; Kruks, 1991; Savin-Williams & Dube, 1998; Strommen, 1993).

In the school setting, teachers tend to hinder the healthy development of GLBT youth and rob them of their healthy adolescent experiences (Rofes, 1989), with less than twenty percent of GLBT students able to identify someone who had been supportive to them (Telljohann & Price, 1993). Gay and lesbian students do not need to be told that public schools foster an environment of negativity toward homosexuality; they live it every day (Maddux, 1988). Rofes (1989), also states that neither school districts nor the gay and lesbian

community have made significant progress in addressing the educational needs of GLBT youth, and that educators must abandon the concept that by discussing homosexuality in a positive manner, they will cause young people to be gay or lesbian. However, in virtually every case where GLBT youth reported that their school experience has been positive, they credited supportive teachers who discussed diversity in the classroom setting (Human Rights Watch, 2001). With this at the forefront, preservice teachers can make a significant difference in the lives of GLBT youth upon entering the classroom, provided they have the knowledge and skills necessary to be a supportive influence in their lives.

Developmental

Research indicates that the acquisition of a homosexual identity begins in childhood and continues as a developmental process into the young adult years (Bell, Weinberg, & Hammersmith, 1981; Troiden, 1989), with most gay adolescent males reporting that they had been aware of their sexual orientation by fourteen (Remafedi, 1987b; Troiden, 1989), or by the age of 10 (D'Augelli & Hershberger, 1993; Herdt & Boxer, 1996). Numerous studies confirm this notion. Telljohann & Price (1993), found that approximately one-third of the subjects claimed they knew they were homosexual between the ages of four and ten, with equal percentages in the ages of 11 to 13, and 14 to 17 years. Bell et al. (1981) conducted a study of 949 homosexual and 477 heterosexual men, and most stated that their sexual orientation was established before adolescence, regardless of whether they had been sexually active at the time or not. Another study by Saghir, Robins, and Walbian, in 1973, discovered that the age at which

most young people acknowledge their homosexuality was between 14 and 16 years for males and between 16 and 19 years for females.

In one court case, which extensively explored the relationship between childhood influences and homosexuality, the testifying experts and the judge agreed that a child's sexual orientation was firmly established by age five or six at the latest. It was also agreed that the child's parents, who were probably heterosexual in orientation, were greater role models than any teacher or textbook material so the danger was minimal in terms of school-related influences. Given these scientific and legal conclusions, the court mentioned that young children who are gay, lesbian, or bisexual would probably benefit from access to information and role models in order to facilitate their optimal development (*Acanfora v. Board of Education of Montgomery County*, 1974).

Issues Facing GLBT Youth

Evidence in the literature suggests that GLBT youth are at high risk for a range of health and mental health problems (D'Augelli & Hershberger, 1993; Hershberger & D'Augelli, 1995; Hetrick & Martin, 1987; Remafedi, 1987b; Safren & Heimberg, 1999; Savin-Williams, 1994), and studies have noted differences between homosexual and heterosexual subjects regarding psychological functioning (DiPlacido, 1998; Ross, 1990; Rotheram-Borus, Hunter, & Rosario, 1994; Savin-Williams, 1994). Many GLBT youth experience isolation, self-hatred, and emotional stress related to the harassment and abuse from peers and adults. These social stressors lead to risk factors associated with alcohol and substance abuse (Orenstein, 2001; Paul, Stall, & Bloomfield, 1991), suicide,

prostitution, running away from home, and academic problems (Grossman & Kerner, 1998; Savin-Williams, 1994; Savin-Williams & Dube, 1998).

Families often reject, abuse, or disown a child who is GLBT. Families may be hurt, angry or humiliated and believe that the child has failed to meet their expectations (Cook, 1991). In fact, forty-two percent of the females and thirty percent of the males indicated that their families reacted negatively to them due to their sexual orientation (Telljohann & Price, 1993), causing many GLBT youth to feel extremely isolated (Martin, 1982). Kolvin and Sadowski (2001), report that up to forty percent of adolescents in the general population experience isolation issues, half the eighty percent prevalence rate found in a study by Hetrick & Martin (1987) for GLBT youth. Feeling as if they had no one to talk to about sexuality issues, they were distanced from their family and peers due to sexual orientation and had a lack of access to good information regarding sexuality, which could help answer questions concerning self. For the GLBT adolescent, accurate information can alleviate feelings of abnormality and isolation, and help create a new and positive identity (Cwayna et al. 1991).

In addition to these external stressors, Gonsiorek (1993) found that many GLBT people internalize negative societal attitudes, resulting in self-image problems ranging from lack of self confidence to self-hatred, depression (Meyer, 1995, Shidlo; 1994), high risk sexual behavior (Rotheram-Borus, Rosario, Van-Rossem, Reid, & Gillis, 1995), and substance abuse or alcoholism (Glaus, 1988).

Rosario et al., in a 1992 study, found that sixty-eight percent of gay male

adolescents reported alcohol use and forty-four percent reported drug use. Among adolescent lesbians, eighty-three percent had used alcohol, fifty-six percent had used drugs, and eleven percent had used crack/cocaine in the three months preceding the study. By analyzing a 1993 sample of Massachusetts high schools, Faulkner and Cranston (1998), found no difference in the use of marijuana between GLBT youth and heterosexual youth in the previous month. They did, however, find differences in heavy marijuana usage (three percent vs. twelve percent) and both lifetime cocaine use (three percent vs. nineteen percent) and current heavy cocaine use (one percent vs. thirteen percent).

In addition to substance abuse issues, GLBT youth suffer at the hands of peers and school personnel on a daily basis through incidents of harassment and violence. A survey of 2,823 junior and senior high students found that the respondents were not only negatively biased against GLBT persons, but at times vicious and threatening violence (DeStefano, 1988). They expressed this bias in harassment and violence toward GLBT identified students. Research indicates that forty-five percent of gay males and twenty percent of lesbians experience verbal or physical assault in high school (National Gay and Lesbian Task Force, 1987). A study by Hunter (1990), reported that forty percent of youth had experienced violent physical attacks, with forty-six percent of those being gay related. Many of these attacks were preceded by an escalation of emotional abuse, name-calling, verbal attacks and threats of violence.

School personnel often allow staff and students to harass and even abuse those who are or are simply thought to be GLBT (Gibson, 1989; Schaecher,

1989); however, in cases of physical violence it is rare when teachers do not intervene, but teachers are not responding to comments (Human Rights Watch, 2001). Living in our society may precipitate a significant degree of stress for GLBT youth, many of which can be tolerated only when youth are in the closet (DiPlacido, 1998). These stresses are directly related to homophobia which is effective in that it successfully denies access, publically shames and humiliates, and subjects individuals and communities to violence (Boler, 1999).

The 2001 National School Climate Survey (GLSEN, 2001b), confirms results from these previous studies, indicating that for many of the nation's GLBT youth schools can be unsafe and dangerous places. Eighty-four percent of the 904 GLBT youth from 48 states surveyed reported hearing homophobic remarks from peers at school, while twenty-three percent reported hearing them from faculty or school staff. In addition, eighty-one percent reported that faculty or staff never or seldom intervened when they were present when the homophobic remarks were made. The study also showed that verbal, physical and sexual harassment were common experiences for GLBT youth, and for those of color or for female students, the abuse was combined by racism and sexism. In the past year, eighty-three percent of GLBT students reported being verbally harassed by name calling or threats due to their orientation. Being sexually harassed by sexual comments or being inappropriately touched by peers was reported by sixty-five percent of respondents, while twenty-one percent of GLBT students reported being physically assaulted because of their sexual orientation. An overwhelming majority, sixty-eight percent, of GLBT youth reported feeling

unsafe at school and were likely to skip school out of fear for their personal safety, and eighty-nine percent of transgendered students reported feeling unsafe due to their gender expression.

The problem of safety not only affects GLBT youth in the public schools where seventy percent reported feeling unsafe; it also affects those attending school in the private sector as well (GLSEN, 2001b). Sixty-five percent of GLBT youth attending private religious schools felt unsafe, and fifty-one percent of those in private secular schools reported feelings of being unsafe. Additionally, GLBT youth in urban, suburban, and rural districts throughout the United States reported safety due to their sexual orientation as a concern. Of the GLBT youth surveyed from urban schools, sixty-two percent reported feelings of being unsafe; seventy percent from suburban schools and seventy-five percent in rural districts reported the same. This feeling caused thirty-one percent of GLBT students to skip a class at least once in the previous month, and thirty percent to skip at least an entire day in the previous month.

The report also acknowledges that schools fail to recognize abuses faced by GLBT students, and that resources and supportive personnel were rare. Eighty percent of respondents to the study reported that there were no positive portrayals of GLBT people in history or events in any of their course work. Of those students who had positive portrayals in their course work, thirty-eight percent stated they felt more like they belonged in the school than those who did not. An additional thirty-nine percent of respondents reported that there were no teachers or school personnel who were supportive of GLBT youth or issues in

their schools, and only thirty-one percent reported that their school had a gay-straight alliance (GSA) or another organization which addressed GLBT issues and concerns. The report also states that GLBT students in schools with GSA's were less likely to feel unsafe in their schools than those who did not.

Victimization of GLBT youth has many consequences, including dropping out of school and truancy (Hunter & Schaecher, 1990). The CDC (1995) reported in their Youth Risk Behavior Surveys (YRBS) that GLBT students were two to four times more likely to have skipped school in the past month than were their non-GLBT classmates. Likewise, Safe Schools Coalition of Washington (SSCW) (1999) found GLBT youth over four times more likely to skip school in the past month out of fear, eighteen percent versus four percent. Remafedi (1987b), found that twenty-eight percent of gay youth were forced to drop out of school because of harassment they suffered as a result of their sexual orientation. Psychological consequences of internalized negative attitudes are not always obvious or conscious (Shidlo, 1994). These issues of oppression are usually dealt with by silence or omission, with sexuality issues more so. With omission and silence being central manifestations of racism, sexism and homophobia, they often stem from ignorance and not from intentional desires to hurt or oppress (Boler, 1999), and need to be addressed within our Nation's schools.

Violence toward GLBT youth also is believed to be related to violence against oneself, manifesting itself in the form of suicidal behavior (Gibson, 1989; Hunter & Schaecher, 1990). Anti-gay harassment, both verbal and physical, has

been found to be common among gay and bisexual males who have attempted suicide compared to those who have not (Rotheram-Borus et al. 1994).

In 1989, the Department of Health and Human Services published the Report of the Secretary's Task Force on Youth Suicide (Gibson, 1989), which estimated that GLBT youth may account for thirty percent of youth suicides in the United States and they are two to three times more likely of suicide than their heterosexual peers. In relation to this study, and others, Buhrich and Loke (1988), conclude that there was not a greater rate of completed suicides among GLBT youth than among heterosexual youth, but that more suicide attempts seem to be made by GLBT youth. Results based on convenience samples, such as the one by Gibson (1989) and others, have consistently found high suicide rates among GLBT youth (Hetrick & Martin, 1987; Kourany, 1987; Remafedi, 1987a; Remafedi et al. 1991; Saunders & Valente, 1987). However, according to McDaniel et al. (2001), Gibson's conclusions regarding GLBT youth suicide risk were rejected by Congress and administration officials who felt the findings were against family values (Savin-Williams, 1994).

Many early conclusions made regarding GLBT youth suicide lacked random samples and heterosexual comparison groups, many lacked to control the factors associated with suicide and suicide attempts (Safren & Heimberg, 1999; Savin-Williams, 1994). Larger, more methodologically-based research studies have confirmed findings from the earlier research, using representative samples of high school students, that suicide rates are higher for GLBT youth when compared to heterosexual youth (Fergusson et al. 1999; Garofalo et al.

1998; Garofalo, Wolf, Wissow, Woods, & Goodman, 1999; McDaniel et al. 2001; Remafadi, French, Story, Resnick & Blum, 1998).

A population-based study which compared youth in Minnesota's public schools revealed that twenty-eight percent of gay or bisexual males reported a past suicide attempt, compared to four percent of heterosexual males. Females in the study showed less dramatic differences with twenty percent of lesbian or bisexual youth reporting a past attempt, in comparison to fourteen percent of heterosexual females (Remafadi et al. 1998). Similar results were found by Garafalo and his colleagues (Garofalo et al. 1998; Garofalo et al. 1999), where gay or bisexual males were six and one half times more likely to report a suicide attempt in the past year than were heterosexual males, and lesbian or bisexual females were twice as likely than their heterosexual counterparts to report a suicide attempt.

Faulkner and Cranston (1998) examined risk behaviors of 3,054 high school students in Massachusetts using a modified version of the Youth Risk Behavior Survey developed by the Center for Disease Control and found, of the 105 who reported same sex sexual contact, twenty-seven percent reported suicide attempts in the previous year compared to thirteen percent of youth who had only heterosexual experiences.

Results of another study confirmed an association between sexual orientation and suicidality where D'Augelli, Hersheberger & Pilkington (2001) questioned 350 GLBT youth aged fourteen to twenty-one, about suicidal thoughts and behaviors. Forty-two percent had sometimes or often thought of

suicide; thirty-three percent reported at least one suicide attempt. Many of the subjects related suicidal ideation and/or attempted suicide to their sexual orientation. Most attempts followed awareness of their same-sex feelings and preceded the disclosure of their sexual orientation to others. Remafedi et al. (1991), also found that many gay male youth reported that their suicide attempts were a result of family problems related to their sexual orientation. Additionally, adolescents who have attempted suicide have been found with a significantly lower self esteem than those who are not suicidal (Pinto & Whisman, 1996).

Previous Research of Attitudes, Beliefs and Knowledge of School Personnel

Homosexuality, as well as attitudes toward it, has existed in most societies since recorded accounts of sexual beliefs and practices have been available (American Academy of Pediatrics, 1993). Recently, national opinion polls about gay and lesbian issues show that Americans have become increasingly tolerant (Yang, 1998), yet the greater visibility of GLBT youth have given rise to public controversy and attacks on homosexuality (Rienzo, Button, & Wald, 1996; Human Rights Watch, 2001). Many studies have looked at the attitudes, beliefs and knowledge of homosexuality, however few have been done with school personnel in mind. Most of the research conducted in the area of attitudes, knowledge and beliefs of professionals towards individuals who are GLBT have been focused in the areas of: social work (Ben-Ari, 1998; Gambrill, Stein, & Brown, 1984; Murphy, 1991); counseling and mental health (Clark, 1979; Davison & Wilson, 1973; Fort, Steiner & Conrad, 1971; Glenn & Russell,

1986; Hunt, 1992; McDermott & Stadler, 1988; Rudolph, 1988; Thompson & Fishburn, 1977).

Maddux (1988), examined the homophobic attitudes of preservice teachers at the University of Cincinnati. In his study involving ninety preservice teachers, he found fifty-two percent of the subjects expressed moderate to high levels of homophobia towards the issue of homosexuality in general, and seventy percent of the subjects expressed moderate to high levels of homophobia towards gay and lesbian students, bringing about a possible realization that the students currently preparing to teach would express negative attitudes towards ten percent of the student population with whom they would come into contact. The most significant indicator of high levels of homophobia was with those who perceived themselves as having a more fundamental religious orientation. Another finding was that preservice teachers who had personally known a GLBT individual exhibited a lesser degree of homophobia than subjects who had not.

Sears (1992), examined the personal feelings and professional attitudes of prospective teachers and counselors toward homosexuality and homosexual students. He found that eighty percent of preservice teachers harbored negative attitudes and feelings toward homosexuality. Also, seventy-five percent of respondents reported that they had encountered negative attitudes about homosexuality from their own high school teachers. This study also indicated that only forty percent of preservice teachers felt it would be acceptable to transfer a GLBT student out of a homophobic teacher's classroom.

Butler (1995), examined 267 preservice teachers at Kent State University, finding that preservice teachers had an overall mean score which put them in the moderately homophobic general attitude range. In looking at differences between male and female respondent's attitudes, the study determined that men held more negative attitudes toward those with GLBT identities, yet not to a significant degree. However, previous research involving surveys of attitudes toward homosexuality, revealed more negative attitudes by men than by women (Bailey, 1996; Butler, 1995; Herek, 1988). Butler also found that both cognitive and affective interventions produced both short and long term positive impacts on preservice teacher attitudes toward homosexuality.

In the largest study to date, Koch (2000), surveyed 813 preservice teachers from both public and private colleges and universities in the state of Illinois. In looking at the differences between special education preservice and other preservice teachers, Koch found no significant differences in their knowledge, attitudes toward gay males or lesbians, nor in gender or in receiving previous instruction in issues relating to GLBT issues. Other research indicates that receiving previous instruction in GLBT issues is a factor in measuring knowledge and attitudes towards GLBT youth, and that preservice teachers who have had such instruction included in their preservice curricula historically score higher on knowledge and attitudes towards GLBT youth (Ben Ari, 1998; Butler, 1995). Even though he did not find that previous instruction was significant in changing attitudes, ironically what he did find was that fifty-seven percent of the respondents felt they needed more training or education to work effectively with

GLBT youth; and sixty-five percent felt they needed more specific training and education to address homosexuality as subject matter in a course they would teach.

Research in the area of preparing preservice teachers to work with GLBT issues is minimal at best; however, studies have shown that graduate students in psychology report insufficient education and training in GLBT issues (Buhrke, 1989; Glenn & Russell, 1986; Pilkington & Cantor, 1996), and that they feel unprepared to work effectively with GLBT clients (Allison, Crawford, Echemendia, Robinson, & Knepp, 1994; Graham, Rawlings, Halpern & Hermes, 1984). The conclusion was the only way to meet the challenges and bridge the gaps is by addressing issues surrounding GLBT youth in preservice training programs.

Foley & Dudzinski (1995) note that training of secondary health educators to deliver sex education appears to have an impact on their attitudes, knowledge base, and comfort levels. Rudolph (1989), also looked at the effects of training workshops, finding that the attitudes towards homosexuality of mental health practitioners were changed, when compared to teachers with no interventions. He found that subjects who were enrolled in a three day multimodal workshop about GLBT counseling issues all improved significantly more than the comparison groups on all measures. These gains in attitude were found to have remained as evidenced by an eight week follow up. The multimodal training workshop appeared to be a positive means of embedding needed attitudes and skills in counselors of GLBT persons. Schneider and Tremble (1986), also found

that training GLBT youth service providers in a workshop environment, suggested more positive and supportive attitudes toward homosexuality after attending. Participants in these workshops were found to have more accurate perceptions of the GLBT population, a decreased tendency to perceive homosexuality as undesirable, and a greater level of comfort with homosexuality.

The literature clearly states that many stressors are intensified in the lives of GLBT youth (D'Augelli et al. 2001), and that educators are either not prepared or unwilling to appropriately address needs or provide safe and nurturing environments for most GLBT students. Bingham (2001) states, "It seems that schooling is too often assimilated to issues of course content, teaching methods, and school rules—and that these issues are usually devoid of discussions of human acknowledgment" (p. 3). Without the knowledge it seems impossible that schools as they exist will meet these challenges and move toward a greater nurturing and understanding of human diversity.

CHAPTER 3

METHODOLOGY

This study was conducted to investigate the knowledge and attitudes towards homosexuality, as identified by both special education and non-special education preservice and inservice teachers. This chapter describes the methodology for this study. Chapter organization is as follows: (a) research questions, (b) setting, (c) sample selection, (d) instrumentation, (e) data collection, and (f) data analysis.

Research Questions

Research Question 1. Will special education preservice teachers be more knowledgeable about homosexuality than non-special education preservice teachers?

Research Question 2. Will special education inservice teachers be more knowledgeable about homosexuality than non-special education inservice teachers?

Research Question 3. Will special education preservice teachers be more knowledgeable about homosexuality than inservice special education teachers?

Research Question 4. Will non-special education preservice teachers be more knowledgeable about homosexuality than non-special education inservice teachers?

Research Question 5. Will preservice special education teachers record lower

homophobic scores than their non-special education preservice peers; suggesting a lesser degree of homophobic attitudes among special education preservice teachers?

Research Question 6. Will special education inservice teachers record lower homophobic scores than their non-special education inservice peers; suggesting a lesser degree of homophobic attitudes among special education inservice teachers?

Research Question 7. Will special education preservice teachers record lower homophobic scores than their special education inservice peers; suggesting a lesser degree of homophobic attitudes among special education preservice teachers?

Research Question 8. Will preservice non-special education teachers record lower homophobic scores than their non-special education inservice peers; suggesting a lesser degree of homophobic attitudes among non-special education preservice teachers?

Research Question 9. Will female subjects record lower homophobic scores than male subjects; suggesting a lesser degree of homophobic attitudes among females?

Research Question 10. Will a preservice or inservice teacher receiving any prior academic instruction regarding serving the needs of GLBT students or with a focus on GLBT issues pose any effect on his/her attitudes and knowledge?

Research Question 11. Will age of preservice or inservice teachers be a factor in the level of knowledge or negative attitudes towards GLBT youth?

Population Sample

Research sites which were utilized for this study included programs within Colleges and/or Universities offering undergraduate and/or graduate courses in education and/or special education. Sites participating in data collection of the survey/questionnaire included: Christopher Newport University; George Washington University; Longwood University; Old Dominion University; The University of North Carolina-Chapel Hill; Virginia Polytechnic Institute and State University; and Virginia Wesleyan College. Students enrolled in education and special education courses on each of these campuses were asked to participate in the completion of the survey. Undergraduate and graduate on-line catalogs from each of the research sites were obtained and course listings examined to produce survey administration courses at each site.

The nature of this study was reviewed and approved by the Institutional Review Board at the University of North Texas, Denton. Once approval was granted to conduct the study, permission was obtained by the Institutional Review Board, and the Deans or Department Chairs of Schools of Education within participating institutions as applicable for an outside researcher to conduct a study. The researcher surveyed a sample of 408 preservice and inservice respondents for this study. Survey research package can be found in Appendix A.

Instrumentation

Two previously developed instruments were used to measure dependent variables in this study; the instruments were designed to measure the knowledge

and attitudes of adults towards homosexuals. The Knowledge about Homosexuality Questionnaire developed by Harris, Nightengale & Owen (1995), was used to measure the dependent variable of the preservice and inservice teacher's knowledge about homosexuality, while Herek's (1988) Attitudes Toward Lesbians and Gay Men (ATLG) measured the dependent variable of attitudes towards homosexuals. Information regarding the development, use, reliability and validity of both of these tests is presented in Appendix B.

The research was designed to determine if the following independent variables contributed to higher levels of knowledge and/or more positive attitudes towards GLBT youth in preservice and inservice teachers: (a) a special education field versus a non-special education field, (b) preservice teachers versus inservice teachers, (c) gender, (d) prior academic instruction regarding serving the needs of GLBT students, or with a focus on GLBT issues, within the framework of their academic course work or in continuing education courses or workshops, and (e) age.

Knowledge about Homosexuality Questionnaire

Preservice and inservice teacher's knowledge of homosexuality was assessed by using the Knowledge about Homosexuality Questionnaire developed by Harris, Nightengale, & Owens (1995). The original questionnaire was a 20-item true/false test, and scores range from 0 to 20, with 20 indicating a perfect score. The first fourteen items were based on the work of Sears (1992). It was designed to measure the knowledge of nurses, social workers, and psychologists about homosexuality and sexual orientation issues, and has been

used to measure knowledge levels of college and high school students (Harris & Vanderhoof, 1995), as well as teachers (Bliss & Harris, 1999). The intent of this instrument is to measure a subject's factual knowledge, not evaluative opinions (Davis, Yarber, Bauserman, Scheer, & Davis, 1998), regarding homosexuality. Requiring approximately 5 minutes to complete, it is typically used as a portion of a larger survey (Koch, 2000). Reliability analysis obtained an alpha coefficient =.86, indicating satisfactory levels of internal consistency.

The instrument used in this study was a modified version developed by Koch (2000) in which two items were deleted, the addition of "don't know" was added for a truer measure of knowledge, and other test items were reworded to relate to education. This modified instrument consisted of 18 true/false items on factual knowledge of homosexuality and generated scores from 0 to 18, with 18 indicating a perfect score.

Attitudes Toward Lesbians and Gay Men Scale

The Attitudes Toward Lesbians and Gay Men (ATLG) Scale (Herek, 1988), measured the general attitudes preservice and inservice teachers held toward lesbians and gay men. The ATLG is a 20-item questionnaire, with the first ten items pertaining to lesbians and the following ten referring to gay men. They can be used together, or individually as sub-scales Attitudes Toward Lesbians (ATL) or Attitudes Toward Gay Men (ATG). A nine-point response scale ranging from "strongly disagree" 1, to "strongly agree" 9 is used to answer each question. The scale is analyzed as a total score of the 20 items. Scoring was accomplished by adding the scores across items for each subscale.

Additionally, reverse scoring was used for some items (See Appendix C). Total scores on the ATLG Scale range from 20 to 180, with higher scores reflecting more negative attitudes; subscale scores can range from 10 to 90. Herek, (1988) advises that users of the scale compute subscale scores, and when appropriate, combine them into a single ATLG score.

Data Collection

Survey's were conducted by the researcher with institutions of higher learning granting permission for the study. Survey questionnaire packets were passed out and collected by the researcher, with their completion taking approximately 15 minutes during a regularly scheduled education or special education course class. Respondents were provided with (a) rationale and purpose of the study, (b) a statement that completion of the questionnaire was completely voluntary and would in no way affect their grade or status in the course, (c) instructions for completion of the survey, and (d) survey packets. Survey packets were collected at the completion by the researcher.

Data Analysis

Total mean scores on the ATLG scale were computed for each participant. The total mean score was used to replace missing values in the event that a participant failed to answer a particular question on the attitude scale. Mean scores and percentages were totaled for items on the Knowledge about Homosexuality Questionnaire. Cronbach's alpha was used to check degree of internal consistency of the survey instruments used, and factorial analysis of variance using the general linear model was performed to determine

if significant differences were found with the independent variables, significance set at $p < .05$.

CHAPTER 4

RESULTS AND DISCUSSION

The purpose of this study was to survey both special education and non-special education preservice and inservice teachers to ascertain their knowledge and attitudes towards students with different sexual orientations. This chapter presents the data received from these surveys. Demographic characteristics of each respondent is presented, as well as a breakdown by participating institution of higher learning. Data are presented around eleven research questions, with related questions grouped together. Implemented statistical procedures and obtained results are discussed. The chapter concludes with a brief summary of these findings.

The results of this study are based on 408 responses from preservice and inservice teachers enrolled at seven institutions of higher education within North Carolina, Virginia, and the District of Columbia that offer teacher training programs in regular and/or special education. Two respondents indicating a homosexual orientation were not included for analysis because the instruments used to measure the dependent variables of knowledge and attitude were developed for heterosexual respondents. Additionally, eight surveys were not included for data analysis due to incomplete or insufficient information. A significance level of $p < .05$ was used for all analyses.

Demographic Characteristics

Each respondent completed a demographic data sheet, the Knowledge About Homosexuality Questionnaire, and the Attitudes Toward Lesbians and Gay Men (ATLG) Scale. The sample consisted of 359 women (88.0%) and 49 men (12.0%) with all participants reporting gender. Special education majors accounted for 106 (26.0%) of the total responses, while the additional 302 (64.0%) represented those in non-special education teaching fields. Ethnic composition of the sample was as follows: 0.7% (N=3) American Indian/Alaskan; 1.2% (N=5) Hispanic; 3.4% (N=14) Asian/Pacific Islander; 6.4% (N=26) Black; and 88.2% (N=360) white. Undergraduate students accounted for 229 (56.1%) of respondents, while 179 (43.9%) reported graduate status. Preservice teachers numbered 273 (66.9%) of completed surveys, while 135 (33.1%) were inservice teachers. Years of experience for the 135 inservice teachers ranged from one to 36, with a mean of 6.43 (sd=7.57). Additionally, 68 (16.7%) were preparing to become special education teachers, while the other 340 (83.3%) respondents were preparing for various education professions.

In respect to the demographic question regarding the sexual orientation of respondents, heterosexuals accounted for 97.1% (N=396); 1.7% (N=7) indicated a bisexual orientation; 0.5% (N=2) stated homosexual; and, 0.7% (N=3) were not sure of their orientation. These results are contradictory to previous studies which indicate that incidence levels for persons with GLBT orientations fall between four and ten percent (Janus & Janus , 1993; Kinsey, Pomeroy, & Martin, 1948, 1953; Klein, 1978; Michael, Gagnon, Laumann, & Kolata, 1994).

The demographic sheet used with the survey asked each participant to respond to ten areas (See Appendix A). Complete demographic breakdowns for all respondents can be found in Table 1.

Table 1

Demographic Characteristics of Respondents

Demographic Data	Number of Respondents	Percentage
Gender		
Female	359	88.0
Male	49	12.0
Age Range		
Age 24 and under	264	64.7
25-34	77	18.9
35-44	31	7.6
45-54	28	6.9
Over 54	8	2.0
Ethnicity		
American Indian/Alaskan	3	0.7
Asian/Pacific Islander	14	3.4
Black, not of Hispanic Origin	26	6.4
Hispanic	5	1.2
White, not of Hispanic Origin	360	88.2
Present Level of Study		
Undergraduate	229	56.1
Graduate	179	43.9
Major		
History Education	20	4.9
Science Education	17	4.2
English/Language Arts Education	32	7.8
Education	30	7.4
Psychology Education	12	2.9
Math Education	19	4.7
Spanish Education	4	1.0

(table continues)

Table 1

Demographic Characteristics of Respondents

Demographic Data	Number of Respondents	Percentage
Major		
PE/Health Education	1	0.2
Undecided	8	2.0
Elementary Education	149	36.5
Art Education	3	0.7
Special Education	64	15.7
Early Childhood Special Education	42	10.3
Career Education	3	0.7
Theater/Communications Education	4	1.0
Teacher Preparation		
Special Education	68	16.7
Non-Special Education	340	83.3
Years of Experience		
Number of Preservice Teachers	273	66.9
Number of Inservice Teachers	135	33.1
Sexual Orientation		
Heterosexual	396	97.1
Bisexual	7	1.7
Homosexual	2	0.5
Not Sure	3	0.7
Homosexuality Presented in Curriculum		
Yes	156	38.2
No	231	56.6
Not Sure	21	5.1
Level Homosexuality Was Presented		
Grades K-8	10	2.5
Grades 9-12	23	5.6
Undergraduate College	120	29.4
Graduate School	9	2.2
No Such Classes	237	58.1
More Than One Level	9	2.2

Table 2 shows the number of special education and non-special education respondents surveyed at each of the seven institutions, as well as undergraduate or graduate status.

Table 2

Respondents at Participating Institutions

Institution	<u>Special Education</u>		<u>Non-Special Education</u>	
	Undergraduate Students	Graduate Students	Undergraduate Students	Graduate Students
Christopher Newport University	8	0	26	18
George Washington University	0	15	2	7
Old Dominion University	0	35	0	13
Virginia Wesleyan College	0	0	22	7
Virginia Tech	8	5	6	24
Longwood University	14	18	125	10
University of North Carolina	2	1	16	26
Totals	32	74	197	105

Research Questions

Eleven research questions were generated to direct this study. Research

questions are addressed in groups as appropriate. Statistical outcomes from procedures which were implemented for the study, along with results, will be given.

Research Questions 1 Through 4

1. Will special education preservice teachers be more knowledgeable about homosexuality than non-special education preservice teachers?
2. Will special education inservice teachers be more knowledgeable about homosexuality than non-special education inservice teachers?
3. Will special education preservice teachers be more knowledgeable about homosexuality than inservice special education teachers?
4. Will non-special education preservice teachers be more knowledgeable about homosexuality than non-special education inservice teachers?

Table 3 shows the results of knowledge comparisons of special education preservice teachers, special education inservice teachers, non-special education preservice teachers, and non-special education inservice teachers. The knowledge instrument consisted of 18 true/false statements on factual knowledge of homosexuality and generated scores from 0 to 18, with 18 indicating a perfect score. The range of scores for all teacher groups was 0 to 18 with a mean of 9.71 (sd=3.49) indicating respondents answered slightly more than half of the questions correctly. The two knowledge questions answered correctly most often by respondents were numbers 36 and 37, which concerned the definitions of “coming out” and “bisexuality”. The two knowledge questions

that were most commonly answered incorrectly were number 32, regarding the Kinsey sexual behavior continuum, and number 34 regarding historical intolerance toward homosexuals.

Table 3

Knowledge Scores of Teacher Groups (Questions 21-38)

Teacher Group	N	Mean	Standard Deviation
Special Education Preservice	48	10.29	3.53
Special Education Inservice	58	10.14	4.08
Non-Special Education Preservice	225	9.42	3.16
Non-Special Education Inservice	77	9.86	3.87
Totals	408	9.71	3.49

Frequencies and percentages for each survey item in the knowledge questionnaire can be found in Table 4. To assess the reliability of the knowledge survey, Cronbach's alpha was calculated. An alpha coefficient of .72 indicated that the scale had sufficient homogeneity.

An analysis of variance was conducted with the general linear model to determine the relationship between type of teacher and knowledge survey score, thereby addressing research questions 1-4. No significant differences in knowledge scores were found among the groups, $F(3,404) = .64$, $p = .58$.

Table 4

Survey Frequencies and Percentages for the Knowledge About Homosexuality Questionnaire

		<u>Percentage and Frequency of Answers</u>		
<u>Survey Question Number and Question</u>		<u>A. True</u>	<u>B. False</u>	<u>C. Don't Know</u>
21.	A child who engages in homosexual behaviors will become a homosexual adult.	4.2%; N=17	*72.1%; N=294	23.8%; N=97
22.	There is a good chance of changing homosexual people into heterosexuals.	11.8%; N=48	*58.8%; N=240	29.4%; N=120
23.	Most homosexuals want to be members of the opposite sex.	5.6%; N=23	*63.7%; N=260	30.6%; N=125
24.	Some church denominations oppose legal and social discrimination against homosexual men and women.	*67.6%; N=276	4.9%; N=20	27.5%; N=112
25.	Sexual orientation is established at an early age.	*41.9%; N=171	21.3%; N=87	36.8%; N=150

Table 4

Survey Frequencies and Percentages for the Knowledge About Homosexuality Questionnaire (Continued)

		<u>Percentage and Frequency of Answers</u>		
<u>Survey Question Number and Question</u>		<u>A. True</u>	<u>B. False</u>	<u>C. Don't Know</u>
26.	According to the American Psychological Association, homosexuality is an illness.	10.1%; N=41	*40.9%; N=167	49.0%; N=200
27.	Homosexual males are more likely to seduce young men than heterosexual males are likely to seduce young girls.	5.6%; N=23	*64.7%; N=264	29.7%; N=121
28.	Gay men are more likely to be victims of violent crime than the general public.	*58.8%; N=240	15.0%; N=61	26.2%; N=107
29.	A majority of homosexuals were seduced in adolescence by a person of the same sex, usually several years older.	15.4%; N=63	*36.3%; N=148	48.3%; N=197
30.	A person becomes a homosexual (develops a homosexual orientation) because he/she chooses to do so.	32.6%; N=133	*41.7%; N=170	25.7%; N=105

Table 4

Survey Frequencies and Percentages for the Knowledge About Homosexuality Questionnaire (Continued)

		<u>Percentage and Frequency of Answers</u>		
Survey Question Number and Question		A. True	B. False	C. Don't Know
31.	Homosexuality does not occur among animals (other than human beings).	9.8%; N=40	*46.1%, N=188	44.1%; N=180
32.	Kinsey and many other researchers consider sexual behavior as a continuum from exclusively homosexual to exclusively heterosexual.	*24.8%; N=101	4.9%; N=20	70.3%; N=287
33.	A homosexual person's gender identity does not agree with his/her biological sex	26.2%; N=107	*30.4%; N=124	43.4%; N=177
34.	Historically, almost every culture has evidenced widespread intolerance toward homosexuals, viewing them as "sick" or as "sinners".	53.4%; N=218	*24.3%; N=99	22.3%; N=91
35.	Heterosexual men tend to express more hostile attitudes toward homosexuals than do heterosexual women.	*76.0%; N=310	5.9%; N=24	18.1%; N=74

Table 4

Survey Frequencies and Percentages for the Knowledge About Homosexuality Questionnaire (Continued)

Survey Question Number and Question	<u>Percentage and Frequency of Answers</u>		
	A. True	B. False	C. Don't Know
36. "Coming out" is a term that homosexuals use for publicly acknowledging their homosexuality.	*93.9%; N=383	2.2%; N=9	3.9%; N=16
37. Bisexuality may be characterized by sexual behaviors and/or responses to both sexes.	*91.2%; N=372	1.2%; N=5	7.6%; N=31
38. Recent research has shown that homosexuality may be linked to chromosomal differences.	*37.7%; N=154	7.1%; N=29	55.1%; N=225

* signifies the correct answer on questionnaire

Research Questions 5 Through 8

5. Will preservice special education teachers record lower homophobic scores than their non-special education preservice peers; suggesting a lesser degree of homophobic attitudes among special education preservice teachers?

6. Will special education inservice teachers record lower homophobic scores than their non-special education inservice peers; suggesting a lesser degree of homophobic attitudes among special education inservice teachers?

7. Will special education preservice teachers record lower homophobic scores than their special education inservice peers; suggesting a lesser degree of homophobic attitudes among special education preservice teachers?

8. Will preservice non-special education teachers record lower homophobic scores than their non-special education inservice peers; suggesting a lesser degree of homophobic attitudes among non-special education preservice teachers?

Total scores on the ATLG Scale range from 20 to 180, with 20 representing accepting attitudes towards persons with different sexual orientations and a score of 180 reflecting the most negative attitudes. The range of scores on the ATLG for all teacher groups combined was 20 to 174 with a mean of 73.89 (sd=38.50) indicating that as a group, respondents have slightly negative attitudes towards students with different sexual orientations. In a breakdown of the ATLG scores, 57.4% (N=234) of the respondents fell into the slightly negative attitude category, 35.5% (N=145) showed moderately negative attitudes, and 7.1% (N=29) possessed extremely negative attitudes. This

indicated that over 40% of preservice and inservice teachers surveyed for this study held moderate to extremely negative attitudes towards persons with different sexual orientations. Cronbach's alpha was used to assess the reliability of the ATLG and its subscales, the ATL and ATG. Cronbach's alpha for the ATLG was .96, indicating high reliability. The subscales also demonstrated strong reliability coefficients of .91 on the ATL, and .94 on the ATG.

Table 5 shows the results of attitude score comparisons of special education preservice teachers, special education inservice teachers, non-special education preservice teachers, and non-special education inservice teachers. An analysis of variance conducted using the general linear model indicated no significant differences in mean attitude scores among groups, $F(3,404) = 2.32$, $p = .07$.

Table 5

Attitude Scores of Teacher Groups (Questions 1-20)

Teacher Group	<u>ATL</u>			<u>ATG</u>			<u>ATLG</u>		
	N	M	SD	N	M	SD	N	M	SD
Special Education Preservice	48	34.02	17.60	48	30.73	17.43	48	64.75	34.08
Special Education Inservice	58	33.83	19.94	58	30.93	18.57	58	64.76	37.76
Non-Special Education Preservice	225	41.38	20.52	225	37.01	19.19	225	78.39	38.79
Non-Special Education Inservice	77	37.64	20.80	77	35.70	19.68	77	73.34	39.23
Totals	408	38.73	20.35	408	35.16	19.11	408	73.89	38.50

Research Question 9

Will female subjects record lower homophobic scores than male subjects; suggesting a lesser degree of homophobic attitudes among females?

The sample investigated responses of 359 women (88.0%) and 49 men (12.0%) to determine if gender was related to the level of negativity in attitudes towards students with different sexual orientations. Table 6 shows the comparison of males and females for the dependent variable. An analysis of variance using the general linear model showed no significant differences in mean attitude score between gender-based groups, $F(1,406) = .02, p = .90$.

Table 6

Attitude Scores by Gender

	Female			Male		
	N	M	SD	N	M	SD
<u>ATLG</u>	359	73.93	37.94	49	73.62	42.79
<u>ATL</u>	359	38.85	20.11	49	37.86	22.24
<u>ATG</u>	359	35.08	18.79	49	35.76	21.53

Research Question 10

Will a preservice or inservice teacher receiving any prior academic instruction regarding serving the needs of GLBT students or with a focus on GLBT issues pose any effect on his/her attitudes and knowledge?

Prior academic instruction in serving the needs of GLBT students, or with

a focus on GLBT issues, was an independent variable examined to determine if receiving prior instruction had any impact on the knowledge or attitudes of respondents. Of the 408 respondents, 38.2% (N=156) had received prior academic instruction on the topic; of those 156 participants, 76.9% (N=120) received such instruction in an undergraduate course. Table 7 shows the comparisons of respondents with and without prior academic instruction concerning GLBT students and/or issues for each dependent variable.

Table 7

Knowledge and Attitude Scores of Teacher Groups With and Without Prior Academic Instruction

	With Prior Instruction			Without Prior Instruction		
	N	M	SD	N	M	SD
<u>Knowledge</u>	156	10.59*	3.14	231	9.14	3.67
<u>ATLG</u>	156	66.01*	36.60	231	78.89	39.24
<u>ATL</u>	156	34.92*	19.35	231	41.16	20.93
<u>ATG</u>	156	31.09*	18.21	231	37.72	19.30

Total Sample: N=156 With Instruction, N=231 Without Instruction, N=21 Not Sure
* $p < .05$

An analysis of variance was conducted using the general linear model to compare respondents who had received prior instruction in such a course, those who had not, and those who responded "Not sure". The ANOVA indicated significant differences in knowledge scores among the groups, $F(2,405) = 9.74$,

$p = .000$. A Tukey post hoc analysis revealed that preservice and inservice teachers with prior academic instruction had significantly higher mean scores on knowledge than those without prior instruction (Refer to Table 8). The relationship of prior instruction and the attitudes preservice and inservice teachers hold towards lesbians and gays was also investigated. An ANOVA indicated significant differences in attitude scores among the groups, $F(2,405) = 5.31$, $p = .005$. An additional Tukey post hoc analysis revealed that preservice and inservice teachers with prior academic instruction had significantly lower mean attitude scores than those without prior instruction, indicating more positive attitudes toward lesbians and gays.

Table 8

Tukey HSD Post Hoc Multiple Comparisons With and Without Prior Instruction

Dependent Variable	Course	Course	Mean Difference	Std. Error	Sig.
<u>Knowledge Score</u>					
	Prior	No Prior	1.45*	.353	.000
		Not Sure	1.16	.791	.308
	No Prior	Prior	-1.45*	.353	.000
		Not Sure	-.29	.776	.926
	Not Sure	Prior	-1.16	.791	.308
		No Prior	.29	.776	.926

(table continues)

Table 8

Tukey HSD Post Hoc Multiple Comparisons With and Without Prior Instruction

Dependent Variable	Course	Course	Mean Difference	Std. Error	Sig.
<u>ATLG Attitude Score</u>					
	Prior	No Prior	-12.87*	3.938	.003
		Not Sure	-11.46	8.833	.397
	No Prior	Prior	12.87*	3.938	.003
		Not Sure	1.41	8.661	.985
	Not Sure	Prior	11.46	8.833	.397
		No Prior	-1.41	8.661	.985

* $p < .05$ Research Question 11

Will age of preservice or inservice teachers be a factor in the level of knowledge or negative attitudes towards GLBT youth?

Respondents were categorized into 5 age groups based on self reporting information provided. An analysis of variance using the general linear model showed no significant differences in mean attitude scores between age-based groups, $F(4,403) = .29, p = .88$). The ANOVA also indicated no significant differences in mean knowledge scores between age groups, $F(4,403) = 2.00, p = .09$. Table 9 shows the results of knowledge and attitude comparisons of respondents based upon age.

Table 9

Knowledge and Attitude Scores by Age

Age Group	<u>Knowledge</u>			<u>Attitude</u>		
	N	M	SD	N	M	SD
24 or Less	264	9.39	3.28	264	75.41	37.57
25-34	77	10.39	3.90	77	68.75	42.11
35-44	31	10.58	3.23	31	73.94	37.40
45-54	28	9.86	4.03	28	73.61	38.37
Over 54	8	9.75	4.46	8	74.25	43.00
Totals	408	9.71	3.49	408	73.89	38.50

Summary of Findings

In this chapter, 11 research questions were presented and statistically analyzed. Analysis of variance using the general linear model was used to examine the relationship between independent variables and the knowledge and attitudes of respondents.

The study found that there were no significant differences in the reported knowledge of homosexuality among the teacher groups surveyed: (a) special education preservice teachers, (b) non-special education preservice teachers, (c) special education inservice teachers, and (d) non-special education inservice

teachers. These same teacher groups also indicated no significant differences in reported attitudes towards persons with different sexual orientations. Lesser degrees of homophobia were not found among teacher groups.

Analysis revealed that neither gender nor age were factors in measures of knowledge or attitude of preservice or inservice teachers. No significant differences were found to indicate a lesser degree of homophobic attitudes among females, as opposed to males, and no age category showed significant differences in reported levels of knowledge or attitudes towards GLBT youth.

Continued analysis of the responses revealed that receiving prior academic instruction regarding serving the needs of GLBT students or with a focus on GLBT issues was a factor on the attitudes and knowledge of preservice and inservice teachers. Those who indicated prior instruction scored higher on the knowledge scale, and expressed more positive attitudes towards persons with different sexual orientations.

CHAPTER 5

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to examine the knowledge and attitudes of both special education and non-special education preservice and inservice teachers towards lesbians and gay men. The results are based on 408 responses from special education and non-special education preservice and inservice teachers enrolled at seven Mid-Atlantic institutions offering teacher preparation programs. Survey questionnaire packets were distributed and collected by the researcher, with their completion taking approximately 15 minutes during a regularly scheduled education or special education course class. Respondents were provided with (a) rationale and purpose of the study, (b) a statement that completion of the questionnaire was completely voluntary and would in no way affect their grade or status in the course, (c) instructions for completion of the survey, and (d) survey packets. Survey packets were collected at the completion by the researcher.

Special education majors accounted for 16.7% (N=106) of the total responses, while the additional 83.3% (N=302) represented those in non-special education teaching fields. The instruments used to measure the dependent variables of knowledge and attitude were developed for heterosexual respondents, and the two responses indicating a homosexual orientation were not included for analysis. An additional eight surveys were not included for data

analysis due to incomplete or insufficient information. All data was gathered between January 15, 2003 and April 29, 2003, and all subjects were volunteers.

Respondents completed a demographic data sheet, the Knowledge About Homosexuality Questionnaire, and the Attitudes Toward Lesbians and Gay Men (ATLG) scale. The research investigated independent variables to determine if they contributed to higher levels of knowledge and/or more positive attitudes towards GLBT youth in preservice and inservice teachers. These variables included (a) preservice teachers, (b) inservice teachers, (c) special education field of study, (d) non-special education fields of study, (e) gender, (f) prior academic instruction in GLBT issues or concerns, and (g) age. An analysis of variance using the general linear model was conducted for each research question. A significance level of $p < .05$ was used for all analyses.

Level of knowledge of special education and non-special education preservice and inservice teachers was determined by the Knowledge About Homosexuality Questionnaire. Mean scores were investigated to determine if differences existed among groups of teachers. The range of scores for all teacher groups was 0 to 18 with a mean of 9.71 (sd=3.49) indicating respondents answered slightly more than half of the questions correctly (Refer to Table 2). No significant differences were found in the mean scores reported for knowledge of homosexuality among teacher groups: (a) special education preservice teachers, mean of 10.29 (sd=3.53); (b) non-special education preservice teachers, mean of 10.14 (sd= 4.08), (c) special education inservice teachers, mean of 9.42 (sd=3.16) and (d) non-special education inservice

teachers, mean of 9.86 (sd=3.87).

Attitudes of special education and non-special education preservice and inservice teachers was evaluated by the Attitudes Toward Lesbians and Gay Men (ATLG) scale. The range of scores on the ATLG for all teacher groups combined was 20 to 174 with a mean of 73.89 (sd=38.50) indicating that as a group, respondents have slightly negative attitudes towards students with different sexual orientations (Refer to Table 3). No significant differences were found in the mean scores reported for attitude towards homosexuality among teacher groups: (a) special education preservice teachers, mean of 64.75 (sd=34.08); (b) non-special education preservice teachers, mean of 78.39 (sd=38.79), (c) special education inservice teachers, mean of 64.76 (sd=37.76) and (d) non-special education inservice teachers, mean of 73.34 (sd=39.23).

The findings showed that non-special education preservice teachers had the highest overall mean scores, indicating the most negative attitudes towards homosexuality. However, the results were not statistically significant at the .05 significance level. In a breakdown of the ATLG scores, 57.4% (N=234) of the respondents fell into the slightly negative attitude category, 35.5% (N=145) showed moderately negative attitudes, and 7.1% (N=29) possessed extremely negative attitudes. This indicated that over 40% of preservice and inservice teachers surveyed for this study held moderate to extremely negative attitudes towards persons with different sexual orientations.

No significant differences were found in the responses of 359 women (88.0%) and 49 men (12.0%) to determine if gender was related to the level of

negativity in attitudes towards students with different sexual orientations. The findings are contradictory to previous studies finding that females held more positive attitudes towards homosexuality than did males (Butler, 1995; Koch, 2000). Table 4 shows the comparison of males and females for the dependant variable.

Significant differences were found in the mean score for knowledge and attitudes among groups receiving prior academic instruction in serving the needs of GLBT students. Of the 408 respondents, 38.2% (N=156) had received prior academic instruction on the topic; of those 156 participants, 76.9% (N=120) received such instruction at the college or university undergraduate level. Table 5 shows the comparisons of respondents with and without prior academic instruction for each dependent variable (Refer to Table 6 for Post Hoc Analysis).

Five age groups were identified in the study, with no significant differences found between age-based groups in the mean scores for knowledge or attitude. Table 7 shows the results of knowledge and attitude comparisons based upon age.

Implications

This study proposed to investigate levels of knowledge and attitudes of special education and non-special education preservice and inservice teachers towards persons with different sexual orientations. The variables addressed in the research included preservice teachers, inservice teachers, special education field of study, non-special education fields of study, gender, prior academic instruction in GLBT issues or concerns, and age. The results of this investigation

illustrate the need for training in GLBT issues within teacher preparation programs. Respondents receiving prior academic instruction had significantly higher mean scores on knowledge of homosexuality, as well as significantly lower mean attitude scores than those without prior instruction. These findings suggest that receiving prior academic instruction in serving the needs of GLBT students increases knowledge and indicates more positive attitudes towards lesbians and gays.

The need to address sexual orientation as a form of cultural diversity in the school context is evident with the findings of this study. Though many teacher education programs have changed program content to more adequately prepare future teachers to meet the needs of diversity within student populations, gay men and lesbians are not generally included in definitions of cultural minority groups (Butler, 1995). This study indicates the need for teachers to be knowledgeable about cultural issues affecting GLBT youth, not only to serve the needs of these students, but to address and evaluate their personal feelings and opinions surrounding the topic as a whole. If teachers are to meet the growing challenges facing youth in their classrooms, they must first face their own fears and belief systems relating to the topics within the lives of GLBT students, which they are certain to encounter. Only then can teachers interact and react positively with all students. The goal of exposing preservice and inservice teachers to issues surrounding GLBT youth is not to change their individual value systems, but rather to evaluate them so they may respond in a manner supportive of individuality, and fostering respect for all students.

Recommendations for Future Research

This study adds to the limited research available on special education and non-special education preservice and inservice teachers' knowledge and attitudes towards individuals with different sexual orientation. Specifically, researchers should look at the effect that prior academic instruction has on the level of knowledge and personal attitudes.

The findings of this study suggest the need for further research in several areas. Several recommendations are offered for extending the current study.

1. A replication study at additional institutions focusing on teacher education programs offering or requiring courses with a focus on GLBT issues and concerns should be conducted. It remains unclear whether the increase in knowledge scores and more positive attitudes are unique to this sample, or are characteristic of preservice and inservice teachers receiving prior academic instruction at other institutions of higher learning.

2. A study looking at current cultural diversity training courses offered, or required, in teacher preparation programs should be evaluated to determine to what extent they are addressing GLBT issues and concerns. This will help to determine what degree of training in GLBT diversity issues is currently provided in teacher preparation programs.

3. Since school districts rely more heavily on inservice training program, It is recommended that inservice and staff development programs be evaluated with in major school districts to determine the extent that GLBT issues are addressed.

4. Future research investigating demographic variables not included in

this study (e.g., ethnicity, level of study, religious affiliation, relationship with someone of a different orientation, or geographic regions) should be examined to determine if they have an effect on the knowledge or attitude of preservice or inservice teachers regarding students with different sexual orientations.

APPENDIX A
SURVEY RESEARCH PACKAGE

Survey Letter Information

Knowledge and Attitudes of Preservice Teachers Toward Students Who are Gay, Lesbian, Bisexual, or Transgendered (GLBT)

The following survey is for a research study in which Daniel J. Morgan, a doctoral candidate in Programs in Special Education at the University of North Texas is conducting. The research is being conducted to determine the attitudes and knowledge of preservice and inservice teachers towards students with different sexual orientations. Research indicates that an estimated four to ten percent of America's 29 million adolescents are GLBT, and that they must endure a wide range of verbal and physical abuse in America's schools. This abuse can lead to suicidal behaviors and/or dropping out of school. Attitudes and behaviors of teaching professionals can help create a safe environment in school for youth, and your honest responses to the survey questions could have significant implications to future teacher training.

The survey will take approximately 20 minutes to complete and your participation is completely voluntary. You may withdraw from the research study at any time and for any reason. Comparisons will be made of special education and non-special education preservice and inservice teachers; as well as, between special education preservice and inservice teachers; and between non-special education preservice and inservice teachers. Data being collected for this survey is being done so anonymously. There is no identification code on the survey, nor will your name be attached to any of the information you provide. Participation is completely voluntary and non-participation will in no way affect your grade or status in this course.

A summary of the results to this survey may be requested by contacting Daniel J. Morgan at (757) 466-9117 or by email at dmorgan375@aol.com.

Thank you for your assistance in this study.

Daniel J. Morgan, Doctoral Candidate
University of North Texas

Survey Instrument

This is a voluntary survey. By completing this survey you are giving consent to participate in this study. To insure anonymity, do not write your name anywhere on the survey. Decision not to complete this survey will not result in any adverse consequences to you. Thank you for assisting me with this research project which is being conducted by Daniel J. Morgan, Doctoral Candidate at the University of North Texas.

Please circle or write in your response to the following questions.

1. Are you:
 - a. Female
 - b. Male

2. Which of the following age ranges do you belong?
 - a. Age 24 and under
 - b. 25-34
 - c. 35-44
 - d. 45-54
 - e. Over 54

3. Which of the following is your ethnic background.
 - a. American Indian or Alaskan Native
 - b. Asian or Pacific Islander
 - c. Black, not of Hispanic Origin
 - d. Hispanic
 - e. White, not of Hispanic Origin

4. What is your present level of study
 - a. Undergraduate
 - b. Graduate

5. What is your major? _____

6. Are you preparing to become a special education teacher?
 - a. Yes
 - b. No

7. How many years of teaching experience do you have? _____

8. How would you describe your sexual orientation?
 - a. Heterosexual
 - b. Bisexual
 - c. Homosexual
 - d. Not sure

9. Have you ever had a class or course in which homosexuality was presented as part of the curriculum?
 - a. Yes
 - b. No
 - c. Not sure

10. At what level was the class in which homosexuality was presented as part of the curriculum?
 - a. Grades K-8
 - b. Grades 9-12
 - c. Undergraduate college
 - d. Graduate school
 - e. I have had no such classes

Items 1-20, answer each item by circling the appropriate number next to each statement using the following scale:

- 1 - (SD) Strongly disagree
 3 - (D) Disagree
 5 - (N) Neither agree nor disagree
 7 - (A) Agree
 9 - (SA) Strongly agree

	SD	N	SA
1. Lesbians just can't fit into our society.	1	2 3 4 5 6 7 8 9	
2. A woman's homosexuality should <u>not</u> be a cause for job discrimination in any situation.	1	2 3 4 5 6 7 8 9	
3. Female homosexuality is detrimental to society because it breaks down the natural divisions between the sexes.	1	2 3 4 5 6 7 8 9	
4. State laws regulating private, consenting lesbian behavior should be loosened.	1	2 3 4 5 6 7 8 9	
5. Female homosexuality is a sin.	1	2 3 4 5 6 7 8 9	
6. The growing number of lesbians indicates a decline in American morals.	1	2 3 4 5 6 7 8 9	
7. Female homosexuality in itself is no problem, but what society makes of it can be a problem.	1	2 3 4 5 6 7 8 9	
8. Female homosexuality is a threat to many of our basic social institutions.	1	2 3 4 5 6 7 8 9	
9. Female homosexuality is an inferior form of sexuality.	1	2 3 4 5 6 7 8 9	
10. Lesbians are sick.	1	2 3 4 5 6 7 8 9	
11. Male homosexual couples should be allowed to adopt children the same as heterosexual couples.	1	2 3 4 5 6 7 8 9	

	SD	N	SA
12. I think male homosexuals are disgusting.	1	2	3 4 5 6 7 8 9
13. Male homosexuals should <u>not</u> be allowed to teach school.	1	2	3 4 5 6 7 8 9
14. Male homosexuality is a perversion.	1	2	3 4 5 6 7 8 9
15. Just as in other species, male homosexuality is a natural expression of sexuality in human men.	1	2	3 4 5 6 7 8 9
16. If a man has homosexual feelings, he should do everything he can do to overcome them.	1	2	3 4 5 6 7 8 9
17. I would <u>not</u> be too upset if I learned that my son was homosexual.	1	2	3 4 5 6 7 8 9
18. Homosexual behavior between two men is just plain wrong.	1	2	3 4 5 6 7 8 9
19. The idea of male homosexual marriages seems ridiculous to me.	1	2	3 4 5 6 7 8 9
20. Male homosexuality is merely a different kind of lifestyle that should <u>not</u> be condemned.	1	2	3 4 5 6 7 8 9

For items 21-38, answer each item by circling A if the item is true, B if the item is false, or C if you Don't Know.

Knowledge about Homosexuality Questionnaire

21. A child who engages in homosexual behaviors will become a homosexual adult.
A. True B. False C. Don't Know
22. There is a good chance of changing homosexual people into heterosexuals.
A. True B. False C. Don't Know
23. Most homosexuals want to be members of the opposite sex.
A. True B. False C. Don't Know
24. Some church denominations oppose legal and social discrimination against homosexual men and women.
A. True B. False C. Don't Know
25. Sexual orientation is established at an early age.
A. True B. False C. Don't Know
26. According to the American Psychological Association, homosexuality is an illness.
A. True B. False C. Don't Know
27. Homosexual males are more likely to seduce young men than heterosexual males are likely to seduce young girls.
A. True B. False C. Don't Know
28. Gay men are more likely to be victims of violent crime than the general public.
A. True B. False C. Don't Know
29. A majority of homosexuals were seduced in adolescence by a person of the same sex, usually several years older.
A. True B. False C. Don't Know
30. A person becomes a homosexual (develops a homosexual orientation) because he/she chooses to do so.
A. True B. False C. Don't Know
31. Homosexuality does not occur among animals (other than human beings).
A. True B. False C. Don't Know

32. Kinsey and many other researchers consider sexual behavior as a continuum from exclusively homosexual to exclusively heterosexual.
A. True B. False C. Don't Know
33. A homosexual person's gender identity does not agree with his/her biological sex.
A. True B. False C. Don't Know
34. Historically, almost every culture has evidenced widespread intolerance toward homosexuals, viewing them as "sick" or as "sinners".
A. True B. False C. Don't Know
35. Heterosexual men tend to express more hostile attitudes toward homosexuals than do heterosexual women.
A. True B. False C. Don't Know
36. "Coming out" is a term that homosexuals use for publicly acknowledging their homosexuality.
A. True B. False C. Don't Know
37. Bisexuality may be characterized by sexual behaviors and/or responses to both sexes.
A. True B. False C. Don't Know
38. Recent research has shown that homosexuality may be linked to chromosomal differences.
A. True B. False C. Don't Know

APPENDIX B
INFORMATION SURROUNDING INSTRUMENTS
USED IN THIS RESEARCH

Information Surrounding Instruments

Used in this Research

Attitudes Towards Lesbians and Gay Men Scale (ATLG)

Description, Use, and Development

- The instrument was developed by Herek (1988).
- The ATLG Scale is a brief measure of heterosexuals' attitudes towards lesbians and gay men.
- The instrument was designed to gather information regarding attitudes toward homosexuality.
- It was developed for heterosexuals and is appropriate for administration in the United States.
- Scale development included factor analysis, item analysis and construct validity studies.
- The strength of the instrument is that it separates subscales for lesbians and gay men.
- The ATLG consists of 20 statements, and is divided into two subscales.
 - The ATG focuses ten statements about gay men.
 - The ATL has ten statements about lesbians.
 - Respondents indicate their levels of agreement or disagreement with the statements.
- The instrument can be used as questionnaire which is self-administered, or can be administered orally.
- Completion time for the ATLG requires between five and ten minutes.

Scoring

- A nine-point response scale ranging from “strongly disagree” = 1, to “strongly agree” = 9 is used to answer each question.
- The scale is analyzed as a total score of the 20 items, which is accomplished by adding the scores across items for each subscale.
- Reverse scoring is used for some items on the instrument.
- Total scores on the ATLG Scale range from 20 to 180, with higher scores reflecting more negative attitudes towards homosexuality.
 - Subscale scores can range from 10 to 90.
 - Herek, (1988) advises that users of the scale compute subscale scores, and when appropriate, combine them into a single ATLG score.

Reliability & Validity

- ATLG and its subscales have shown high levels of internal consistency.
 - Alpha coefficients over the past ten years report total ATLG scale = .90 (Herek, 1994)
 - With college student samples, alpha levels were higher than .85 for the subscales and .90 for the full scale (Herek, 1988).
 - Non student adults alpha values typically exceed .80 (Herek, 1994).
- The ATLG and subscales are frequently correlated with other theory related constructs.
- Higher scores indicating more negative attitudes, correlate significantly with religiosity, limited contact with gay or lesbians, and those with traditional family ideology (Herek, 1994).

Knowledge about Homosexuality Questionnaire

Description, Use, and Development

- The questionnaire was developed by Harris, Nightengale, & Owens (1995).
- It was designed to measure the knowledge of nurses, social workers, and psychologists about homosexuality and sexual orientation issues.
 - The instrument has been used to measure knowledge levels of college and high school students (Harris & Vanderhoof, 1995).
 - The instrument has been used to measure knowledge levels of teachers (Bliss & Harris, 1999).
- The intent of this instrument is to measure a subject's factual knowledge, not evaluative opinions regarding homosexuality (Davis, Yarber, Bauserman, Scheer & Davis, 1998).
- The test requires approximately five minutes to complete.
- The questionnaire is typically used as a portion of a larger survey (Koch, 2000).
- The original questionnaire was a 20-item true/false test. The first fourteen items were based on the work of Sears (1992).

Scoring

- Total scores range from 0 to 20, with 20 indicating a perfect score.
- Percentages and frequencies are generally reported for respondents.
- Higher scores on the questionnaire indicate a higher level of knowledge about homosexuality from respondents.

Reliability & Validity

- Mean scores from the original administration of the questionnaire were 16.3 (eighty-two percent correct) for a sample of health-care professionals, with a Chronbach's alpha of .70.
- In a study with college students, mean scores were 14.4 (seventy-two percent correct) with an alpha of .74 (Harris & Vanderhoof, 1995).
- In a study involving high school students, a mean score of 12.7 (sixty-three percent correct) was obtained, and an alpha of .28 was indicated (Harris & Vanderhoof, 1995).
- The mean score for a sample of teachers was 13.08 (sixty-five percent correct) with an alpha coefficient = .86 (Bliss & Harris, 1999).
- Construct validity for the instrument indicated that people who have more relevant education score higher on the instrument (Koch, 2000).

APPENDIX C
SURVEY PACKAGE SCORING
AND
ANSWERS

Attitudes Toward Lesbians and Gay Men (ATLG) Scale

Items which are starred (*) indicate the need for reverse scoring:

1. Lesbians just can't fit into our society.
2. A woman's homosexuality should not be a cause for job discrimination in any situation. *
3. Female homosexuality is detrimental to society because it breaks down the natural divisions between the sexes.
4. State laws regulating private, consenting lesbian behavior should be loosened. *
5. Female homosexuality is a sin.
6. The growing number of lesbians indicates a decline in American morals.
7. Female homosexuality in itself is no problem, but what society makes of it can be a problem. *
8. Female homosexuality is a threat to many of our basic social institutions.
9. Female homosexuality is an inferior form of sexuality.
10. Lesbians are sick.
11. Male homosexual couples should be allowed to adopt children the same as heterosexual couples. *
12. I think male homosexuals are disgusting.
13. Male homosexuals should not be allowed to teach school.
14. Male homosexuality is a perversion.
15. Just as in other species, male homosexuality is a natural expression of sexuality in human men. *
16. If a man has homosexual feelings, he should do everything he can do to overcome them.
17. I would not be too upset if I learned that my son was homosexual. *

18. Homosexual behavior between two men is just plain wrong.
19. The idea of male homosexual marriages seems ridiculous to me.
20. Male homosexuality is merely a different kind of lifestyle that should not be condemned. *

Answers for the Knowledge about Homosexuality Questionnaire

21. A child who engages in homosexual behaviors will become a homosexual adult.
 A. True **B. False** C. Don't Know
22. There is a good chance of changing homosexual people into heterosexuals.
 A. True **B. False** C. Don't Know
23. Most homosexuals want to be members of the opposite sex.
 A. True **B. False** C. Don't Know
24. Some church denominations oppose legal and social discrimination against homosexual men and women.
A. True B. False C. Don't Know
25. Sexual orientation is established at an early age.
A. True B. False C. Don't Know
26. According to the American Psychological Association, homosexuality is an illness.
 A. True **B. False** C. Don't Know
27. Homosexual males are more likely to seduce young men than heterosexual males are likely to seduce young girls.
 A. True **B. False** C. Don't Know
28. Gay men are more likely to be victims of violent crime than the general public.
A. True B. False C. Don't Know
29. A majority of homosexuals were seduced in adolescence by a person of the same sex, usually several years older.
 A. True **B. False** C. Don't Know
30. A person becomes a homosexual (develops a homosexual orientation) because he/she chooses to do so.
 A. True **B. False** C. Don't Know

31. Homosexuality does not occur among animals (other than human beings).
A. True **B. False** C. Don't Know
32. Kinsey and many other researchers consider sexual behavior as a continuum from exclusively homosexual to exclusively heterosexual.
A. True B. False C. Don't Know
33. A homosexual person's gender identity does not agree with his/her biological sex.
A. True **B. False** C. Don't Know
34. Historically, almost every culture has evidenced widespread intolerance toward homosexuals, viewing them as "sick" or as "sinners".
A. True **B. False** C. Don't Know
35. Heterosexual men tend to express more hostile attitudes toward homosexuals than do heterosexual women.
A. True B. False C. Don't Know
36. "Coming out" is a term that homosexuals use for publicly acknowledging their homosexuality.
A. True B. False C. Don't Know
37. Bisexuality may be characterized by sexual behaviors and/or responses to both sexes.
A. True B. False C. Don't Know
38. Recent research has shown that homosexuality may be linked to chromosomal differences.
A. True B. False C. Don't Know

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