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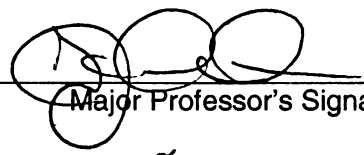

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FUTURE TEACHERS' ATTITUDES AND ANTICIPATED BEHAVIORS TOWARD SEXUAL MINORITY YOUTH

By

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ABSTRACT

FUTURE TEACHERS' ATTITUDES AND ANTICIPATED BEHAVIORS TOWARD SEXUAL MINORITY YOUTH

By

Amanda Jane Hirsch

The current study addressed the lack of research on preservice teacher attitudes and knowledge about sexual minorities (i.e. gay, lesbian, bisexual, or questioning [GLBQ]). It examined educators' attitudes, behaviors, and knowledge; however, the participant group was preservice teachers, adding information about an overlooked group of educators who will have significant impact on sexual minority students in the future. Two hundred three future educators completed measures assessing their attitudes toward, feelings about, and knowledge of sexual minorities and anticipated behaviors toward sexual minority students. Results indicated that preservice teachers express relatively positive attitudes and feelings toward sexual minorities but still have limited knowledge about sexual orientation and homosexuality. Greater knowledge was associated with more positive attitudes and feelings. Differences in attitudes and feelings were also found based on participant sex, frequency of religious attendance, and friendship with a person who identifies as GLBQ. Preservice teachers reported that they would behave differently toward a sexual minority student than toward a heterosexual student. Also many teachers reported an unwillingness to discuss, or even raise, age-appropriate topics related to sexual orientation in the classroom. However, they were significantly more willing to have discussions about race and ethnicity. The implications of these results for school psychologists are discussed as are next steps for future research.

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Chapter 1

Introduction

School psychologists are obligated to ensure that all students have an equal opportunity for personal identity development in an environment free from discrimination, harassment, violence, and abuse (National Association of School Psychologists [NASP], 2004). Other professionals within schools, particularly teachers, are also in a prime position to affect the environment in ways that promote tolerance and acceptance. According to Coleman (1988) supportive teachers and non-family adult role models are important for healthy adolescent development. One especially salient factor is teacher attitudes and values, given the amount of time young people spend with teachers.

One group of students that has been historically overlooked when considering ways to make the school environment more welcoming is sexual minority youth (i.e. gay, lesbian, bisexual, or questioning [GLBQ]). Researchers estimate that between five and six percent (about 2 million) of youth identify as GLBQ (Human Rights Watch, 2001). When also considering sexual minority parents, this translates to about 8 to 14 million school age youth who may currently be dealing with issues relating to sexual orientation, either their own or that of their caregivers (Casper & Schultz, 1999). According to Athanases and Larrabee (2003), denial and silence obscure the reality of GLBQ-identified youth in schools. However, more recently, an increasing amount of research has focused on the mental health, school experiences, and well-being of students who self-identify as sexual minorities.

Given what is already known about how environment reciprocally impacts people (Bronfenbrenner, 1977) it is important to examine environmental factors in the school that may influence outcomes of sexual minority students. Young people spend more time in schools than in any other non-home setting. According to Tharinger and Wells (2000), previous research has demonstrated the relationship between academic achievement and later accomplishments. Teachers, who may often serve as additional or substitute parental attachment figures for adolescents, are often not available to sexual minority youth (Woog, 1995). The negative attitudes that teachers may hold toward this population affect the expectations the teacher has for these students, which then may impact students' academic and social outcomes (Salvia, Clark, & Ysseldyke, 1973).

Background to the Problem

In 1996, Jamie Nabozny successfully won a court case filed against his former high school (i.e., school district, district administrator, two principals, and an assistant principal) for failing to respond to his (and his parents') complaints about and protect him from anti-gay harassment and violence (*Nabozny v. Podlesny,* 1995/1996). The suit alleged that this situation was especially problematic in comparison with the protection afforded to other students faced with other forms of harassment. The school settled with Nabozny for medical expenses and damages, totaling almost one million dollars. This has not been the only trial to produce case law directly linked with concerns of sexual minority youth in schools, and there are a number more being settled, decided, and/or in progress (Henning-Stout, James, & Macintosh, 2000). This case, and others like it, exemplifies the legal and ethical importance of ensuring a safe and harassment-free environment for all students. While writing an anti-harassment policy is a positive step

toward improving school climate, schools must also implement and enforce such policies to ensure the creation of safe climates for all students.

Many times, teachers fail to respond to violence and harassment directed at sexual minority youth. Teachers are either inadequately prepared to handle such situations or are merely unwilling to intervene. A survey of 887 GLBQ high school students from 48 states and the District of Columbia conducted by the Gay, Lesbian, and Straight Education Network (GLSEN; Kosciw, 2004) found that 91.5% of respondents reported hearing homophobic remarks at school, with 84% reporting being verbally harassed because of their identified or perceived sexual orientation. At times, faculty and staff contributed to the problem by either making homophobic comments themselves or failing to intervene upon hearing the remarks; in fact, 82.9% of the responding students reported that faculty or staff never intervened or intervened only some of the time when present when homophobic remarks were made. A study of 289 teachers and 52 principals from nine urban, suburban, and rural high schools indicated that teachers were the least willing group to discuss homosexuality with students (Woog, 1995).

Community members and educators continue to resist attention to concerns related to this population, often punishing educators who dare to address these issues (Athanases & Larrabee, 2003). Athanases and Larrabee, in their study focusing on the role of teachers in advocating for sexual minority youth, noted that teachers have been disciplined and fired for serving as faculty sponsors of GSAs (gay-straight alliances), for holding class discussions about sexual minority-related issues in the media, for using curricular materials that include GLBQ-identified people, and for openly identifying as sexual minorities. At the governmental level, anti-gay legislation in many states

continues to be proposed and passed. In California, one community group went further, organizing a "Take Back the Schools" campaign to remove from schools all references to homosexuality as anything other than sick or sinful (Athanases & Larrabee).

Purpose of the Study

In teacher training programs, if information about sexual minorities is included at all, it is often relegated to one topic within a larger course on diversity (Athanases & Larrabee, 2003). Therefore, teachers often enter school settings lacking knowledge of this population and what can be done to support them. Research shows that more information about GLBQ youth among prospective teachers is not only needed but welcomed, and that increased knowledge leads to increased understanding and support (Athanases & Larrabee). This indicates a greater need for teacher education, support, and advocacy, so as to create a more positive school and classroom environment for all students.

Despite the important role that teachers play in sexual minority students' lives, very little is actually known about teachers' attitudes and values, and the degree to which these are relayed to students, either explicitly or implicitly. One way to learn more is to explore such beliefs in preservice teachers, who will soon be entering the classroom. This population is especially relevant, given the potential for implementing more thorough education and training programs for new teachers before they even enter the classroom. Therefore, the purpose of this study was to address the dearth of research in this area and to learn more about preservice teachers' knowledge about homosexuality and their attitudes, feelings, and anticipated behaviors toward both sexual minorities in general and sexual minority students in particular. Also, this study investigated variables that may be associated with these constructs, including sex, certification level, age, experiences in

courses that provide information on sexual minorities, and personal relationships (e.g. family, friends, acquaintances) with self-identified GLB people.

Significance of the Study

Sexual minority youth face a number of risk factors as they work to develop their unique identity within a society that still actively condemns people with different sexual orientations. Such risk factors include low self-esteem and self-hatred, suicidal ideation or attempt, social isolation, substance use, antigay harassment or mistreatment, negative family interactions, repeated stress, conflicts about or rejection upon coming out, depression, and negative social attitudes (Friedman & Downey, 1994; Hershberger, Pilkington, & D'Augelli, 1997; Remafedi, Farrow, & Deisher, 1991; Russell, 2003; Russell & Joyner, 2001). In interviews with 50 self-identified GLB students, school-based homophobia was found to be associated with lower self-esteem and increased likelihood of self-destructive behavior (Uribe & Harbeck, 1991). However, such homophobia does not only impact sexual minority students. Poteat and Espelage (2007) found that homophobic victimization significantly predicted increased anxiety and depression, personal distress, and lower sense of school belonging in males, regardless of the individual's actual sexual orientation, and higher levels of withdrawal in females, again regardless of the individual's actual sexual orientation. In light of these findings, and given the amount of time that students spend interacting with teachers, who can play a vital role in halting such victimization, the ways that preservice teachers' attitudes and feelings may manifest in teacher behaviors (or potentially lack of behaviors) are vital to examine.

School psychologists are in an ideal position to help teachers be a supportive and knowledgeable presence in the lives of sexual minority youth. Knowing the impact (positive and negative) teachers may have on these students, there are many roles school psychologists may fill, such as conducting professional development trainings, consulting with teachers and other school staff, strengthening program evaluation and development for sexual minority youth and paying consistent attention to and interrupting incidents of harassment toward GLB youth in the schools (Henning-Stout et al., 2000). In addition, by knowing the attitudes, feelings, and knowledge of preservice teachers, school psychologists can work to educate teachers on the needs of and ways to provide the much-needed support to this population and to improve school climate for all students.

Chapter 2

Review of Literature

In the last decade, research focusing on youth who identify as sexual minorities (i.e. gay, lesbian, bisexual, and questioning [GLBQ]) has increased. This increase, combined with a number of social, cultural, and educational factors, has led to greater attention to (and controversy surrounding) the role and functioning of this population in schools. Within every school there is an invisible GLBQ population (Mudrey-Camino, 2002). In addition, the needs of these students are often unknown and unmet in educational settings (Kissen, 1991).

Sexual Orientation and Society

According to Walters and Hayes (1998), "research about homosexuality has flourished in the past twenty-five years" (p. 2). Historical and anthropological investigations have shown that same-gender attraction and behavior have been expressed in some form throughout history, being reported in nearly all societies and in most non-human species. Several etiological explanations for the origin of sexual orientation have been proposed; however, regardless of such explanations, research from the behavioral and biological sciences has shown that gay, lesbian, and bisexual orientations are "neither unusual or unnatural" (Walters & Hayes, p. 2). In fact, current researchers agree that approximately 6 to 10% of, or between 7 and 15 million, Americans consider themselves to be GLB (Patterson, 1995). This number does not take into account the network of people who are affected by an individual's sexual minority identification, including family and friends (Tharinger & Wells, 2000). When these relationships are considered,

at least 50 million Americans identify as GLB or have a friend or family member who does (Tharinger & Wells).

Despite this research, topics related to sexual orientation remain a divisive issue in the United States (Walters & Hayes, 1998). Research by Herek (2002a) examined public opinion surveys of heterosexuals' attitudes toward lesbians, gay men, and a variety of topics related to homosexuality and showed that heterosexual women tended to hold more positive attitudes toward both lesbians and gay men than did heterosexual men and that both men and women tended to hold more negative views toward gay men than toward lesbians. Overall, research has shown that most Americans believe homosexuality to be immoral and a threat to societal values (Yang, 1997). As a direct result of these beliefs, there has been little support among the general population for most gay political goals, especially for gay representation in the schools (Yang). According to Jenny, Rustler, and Power (1994), one reason for this lack of support is that many people with heterosexual identities harbor strong, yet unsubstantiated, fears about gay "recruitment" and abuse of children.

Homophobia and Heterosexism. Heterosexism, defined as "the ideological system that denies, denigrates, and stigmatizes any non-heterosexual form of behavior, identity, relationship, or community" (Herek as cited in Tharinger & Wells, 2000, p. 160), is becoming a more widely used term because it is more accurate in describing the negative treatment of and attitudes toward people with non-heterosexual sexual orientations than is the term homophobia (Tharinger & Wells). Heterosexism manifests as the belief, spoken or unspoken, that heterosexuality and heterosexual persons are in some way superior to or more valued than other sexual orientations; in research and practice, such practices are

visible through the failure to recognize the unique developmental processes experienced by, or even the existence of, sexual minority persons (Tharinger & Wells). Heterosexism is used to describe a continuum of negative affective responses and attitudes toward lesbians and gay men and the behaviors based on those prejudices; therefore it reflects such attitudes and feelings more precisely than the also widely-used term homophobia, which implies clinical levels of fear and physiological response in ways similar to other phobias (Herek, 1995; Snively, Kreuger, Stretch, Watt, & Chadha, 2004). The author recognizes that, as a label, "homophobia" is less accurate, with "heterosexism" being the more precise term (Herek). However, because the term remains more recognizable among the general population as relating to gay oppression and because it reflects one of this study's measurement labels, "homophobia" was used in this study.

Homophobia is supported by cultural norms (Herek, 1990) and is manifested through anxiety, fear, disgust, anger, discomfort, aversion and/or hostile and violent behaviors directed towards lesbians, gay men and bisexual persons (Herek, 1984; Hudson & Ricketts, 1980). It operates at both sociocultural and individual levels to maintain differential power between persons with sexual minority status and the dominant group, heterosexuals. Several studies have supported the assertion that antigay attitudes are highly correlated with antigay behaviors, such as verbal and physical attacks (Franklin, 2000; Roderick, McCammon, Long, & Allred, 1998). In fact, alarming numbers of GLB people face discrimination, harassment, and violence because of their actual or perceived sexual orientation (D'Augelli & Grossman, 2001; D'Augelli, Pilkington, & Hershberger, 2002; Thurlow, 2001). The exact extent of this victimization cannot be known for sure because of underreporting by victims and lack of investigation and follow-up by officials.

Sexual Minority Youth

Prevalence. It is difficult to determine how many school-age sexual minority youth (a term increasingly used to refer to GLBQ adolescents and used in this review) there are in the United States. Part of this difficulty stems from the variety of definitions used for sexual orientation in research with this population (Holmes & Cahill, 2005). For example, methods including self-identification, reported sexual experiences, and responses about romantic attraction and fantasies have all been used in research on sexual minority youth (Holmes & Cahill). In addition, self-labeling gay male, lesbian, and bisexual youth are coming out at younger ages, on average at age sixteen (Human Rights Watch, 2001). Various studies have reported prevalence ranging from 4% to 11.8% for students who either identify as gay, lesbian, bisexual, or questioning or who reported same-gender sexual fantasies and attractions or anticipated future same-gender experiences.

The National Longitudinal Study of Adolescent Health (Add Health) is a federally funded, longitudinal study of adolescents in the United States. In the first wave, more than 11,000 students in 7th to 12th grade, and one parent (usually a mother), participated in the study. In the Add Health report, Russell, Seif, & Truong (2001) noted that 7.4% of boys and 5.3% of girls reported same-sex romantic attraction, either exclusively or in addition to other-sex attraction. More girls than boys reported exclusively same-sex attraction (1.5% vs. 0.7%), with attraction to both sexes occurring more frequently in boys than in girls (6.5% vs. 3.8%). Unlike other studies the Add Health study did not include measures of sexual identity (self-identification as gay, lesbian, or bisexual), instead asking two questions focusing on romantic attraction that are not based only on

same-sex versus other-sex orientation (Russell, Seif, & Truong). The researchers instead used the terms "heterosexual", "bisexual attractions", and "exclusively same-sex attraction" (Russell, Seif, & Truong).

An earlier, self-administered survey of adolescent health included five items pertaining to sexual attraction, identity, fantasy, behavior, and affiliation, Remafedi, Resnick, Blum, and Harris (1992) found that, among 34,706 Minnesota students in grades 7 through 12, 10.7% of students reported being "unsure" of their sexual orientation, 88.2% described themselves as predominantly heterosexual, and 1.1% described themselves as bisexual or predominantly gay or lesbian. Students who said they were unsure of their sexual orientation were more likely to report same-sex fantasies and attractions and less likely to have had other-sex sexual experiences. The reported prevalence of same-sex attractions (4.5%) exceeded same-sex fantasies (2.6%), sexual behavior (1%), or affiliation (0.4%).

Developmental Processes in Adolescence. Scientific inquiry into adolescent development has increased after a period of relative invisibility (Tharinger & Wells, 2000). According to Tharinger and Wells, young adults in this stage are experiencing biological/pubertal changes, psychological/cognitive changes, and social redefinition. More specifically, changes occur in peer and family relationships, in the impact of the schooling environment, and, in some cases, as the result of the effects of working. In addition to all these tasks, adolescents also negotiate the developmental tasks of identity, achievement, sexuality, intimacy, autonomy, and forming new attachments. Change is the defining characteristic of adolescence, although there is individual variability in the onset, duration, and intensity of the changes. Unlike past theories and research (e.g.

Erikson, 1950), more recent research instead focuses on viewing adolescence as a time of more intense developmental change, where pathology is not the norm.

Developmental Processes in Sexual Minority Youth. Sexual minority youth are commonly first aware of their same-sex attraction around 10 to 12 years old (D'Augelli & Dark, 1995); this awareness may be non-specific in some cases, such as feeling different from or outside the peer group. By around age 15, they begin to label these feelings and themselves as lesbian, gay, or bisexual and generally disclose their identities to someone else for the first time around age 16.

In addition to the recognized developmental tasks of adolescence previously mentioned, sexual minority youth encounter additional, unique challenges related to the recognition of and response to a gay, lesbian, bisexual, or questioning identity (Tharinger & Wells, 2000). These consist of exploring and navigating intimate and sexual same-sex relationships, as well as the reactions of parents, family, peers, school, community, and society in general following disclosure (Tharinger & Wells). Given the aforementioned influence of heterosexism, homophobia, and misunderstanding about homosexuality, the developmental process for adolescents attempting to recognize, accept, and integrate a sexual minority identity is a significant challenge for most, if not all, of these youth and from a developmental perspective, these youth are in a "high-risk" context (Anhalt & Morris, 1998; Tharinger & Wells). Development for this group occurs in the context and ecology of cultural denial, stereotypes, rejection, harassment, and outright victimization and abuse. Tharinger and Wells argue that, developmentally, what is most challenging is the actual and feared reactions and rejections from significant others, particularly parents but also siblings, friends, peers, and teachers. According to Cicchetti and Toth (1998),

developmental psychology literature indicates that such high risk contexts have lasting effects when they damage or negatively affect adaptive systems, including parent-child attachment, cognition, or self-regulation of attention, emotion, and behavior.

Risk Factors. In addition to the typical developmental processes, sexual minority youth must navigate a different set of tasks related to identifying as GLBQ. There are many potential risk factors that sexual minority youth may face throughout this process, including low self-esteem and self-hatred, suicidal ideation or attempt, social isolation, substance use, antigay harassment or mistreatment, negative family interactions, repeated stress, conflicts about or rejection upon coming out, depression, and negative social attitudes (Friedman & Downey, 1994; Hershberger, Pilkington, & D'Augelli, 1997; Remafedi, Farrow, & Deisher, 1991; Russell, 2003; Russell & Joyner, 2001).

According to McFarland (1998), self-esteem is one of the factors that become amplified for GLB young adults due to their unique developmental processes. He points out that gay youth often internalize a negative image of being wrong or worthless due to the negative myths and stereotypes held by society (McFarland). No direct causal relationship has ever been discovered between lesbian, gay, or bisexual orientation and psychopathology, indicating that being a sexual minority in and of itself does not lead to psychological problems (Saulnier, 1998). Rather, psychiatric symptoms can only be explained in social or sociopolitical terms, rather than in psychological terms (Saulnier).

In a study by Grossman and Kerner (1998) of 90 predominantly African American and Latino/a, self-identified, urban, gay male and lesbian youth, researchers found that self-esteem was a predictor of moderate strength for emotional distress in the total and male samples and was a strong predictor in the female sample. In this study

63% of the youth reported using alcohol, 50% reported using drugs, and 56% reported having had suicidal thoughts in the past month, with 30% reporting having made one or more suicide attempts.

According to Holmes and Cahill (2005), youth who witness or are victims of mistreatment or struggle with some of the previously mentioned risk factors are at higher risk for substance use/abuse, depression, eating disorders, sexually transmitted infections, suicidal ideation, and suicide attempts or completion. Hetrick and Martin (1987) found that about 80 percent of sexual minority youth report significant depression and isolation problems, as compared with fifteen to forty percent of their heterosexual peers. In a study by Proctor and Groze (1994), 276 GLB youth were surveyed as to whether they had ever made a suicide attempt. Of the youths participating, 66.1 % reported experiencing some form of suicidal behavior, ranging from ideation to attempting. More specifically, 40.3% of these had attempted suicide at least once, while 25.8% admitted seriously contemplating it.

Additional research has also examined a number of other mental health issues in GLBQ youth. A report on the results of the 1997 Wisconsin Youth Risk Behavior Survey noted that youth harassed because they were perceived to be gay were four times as likely as other youth to have made a serious enough suicide attempt within the previous twelve months to be treated by medical professionals (Reis & Saewyc, 1999). In addition, these youth were twice as likely to report having used inhalants, three times as likely to have been pregnant or gotten someone pregnant, and four times as likely to have vomited or taken laxatives to lose weight within the last 30 days. Hershberger, Pilkington, and D'Augelli (1997) note that many gay adolescents who complete a suicide have not come

out and disclosed their sexual orientation to anyone else, making it difficult to estimate the impact of sexual orientation concerns as a factor in suicide in young people. In this study, Hershberger et al. also surveyed 194 GLB young people from across the nation. Forty-two percent reported at least one suicide attempt, with the number varying from one to fifteen total attempts. Of these, 23% were "multiple occasion attempters" (p. 485). In the week just prior to the data collection, 39% of the participants reported suicidal thinking. Another study found that GLB young adults, both socially and emotionally, may end up fearful, withdrawn, chronically depressed, and full of despair about the future quality of their lives (Gibson, 1989). Additionally, in a study by Remafedi, Farrow, and Deisher (1991), 30% of the 137 GLB participants reported experiencing depression.

School Climate and Outcomes

Young people spend more time in schools than in any other non-home setting. According to Tharinger and Wells (2000), previous research has demonstrated the relationship between academic achievement and later accomplishments. Sexual minority youth who choose to stay in school despite daily stigmatization do not perform as well as their peers (Elia, 1993). According to Elia, while a hostile learning environment increases the difficulty of learning for any student, the GLB student without support is at an increased risk of academic difficulties and dropping out. In Elia's report on sexual minority youth, 80% had declining school performance, about 40% had problems with truancy, and 30% had dropped out of school. As D'Augelli (1998) points out, these findings demonstrate the significant role of schools in our understanding of GLB youths' transitions into early adulthood.

A survey of 887 GLBQ high school students from 48 states and the District of Columbia was conducted by the Gay, Lesbian, and Straight Education Network (GLSEN; Kosciw, 2004). This survey is the only study to examine school-specific experiences of GLBQ-identified youth nationally. Researchers found that more than 90% of GLBQ students reported frequently or often hearing homophobic remarks (e.g. "fag" or "dyke" used in a derogatory manner) at school, with 84% reporting being verbally harassed because of their identified or perceived sexual orientation. At times, faculty and staff contributed to the problem by either making homophobic comments themselves or failing to intervene upon hearing the remarks; in fact, 82.9% of the responding students reported that faculty or staff never intervened or intervened only some of the time when present when homophobic remarks were made. Although homophobic remarks were most commonly reported, racist and sexist remarks and negative remarks about gender expression were also heard very often in schools. GLBQ youth reported that other students more often made homophobic remarks whereas school faculty or staff more often made sexist remarks. However, in contrast to homophobic remarks, both faculty/staff and students reportedly intervened more often when racist remarks were made. Intervention occurred least frequently when homophobic remarks and remarks about gender expression were made.

In addition to verbal harassment, 39.1% of sexual minority students reported being physically harassed (e.g. shoved, pushed, etc.) because of their sexual orientation (Kosciw, 2004). Fifty-eight percent of this population reported having property stolen or deliberately damaged/defaced at school as compared with just 35% of students surveyed in a national sample of all high school students that was conducted by the Department of

Justice. As a result of the negative school environment and lack of support, 64.3% of sexual minority students reported feeling unsafe at school because of their sexual orientation and 28.6% report missing at least one full day of school in the past month due to feeling unsafe. This rate was even higher (35.1%) among GLBQ students of color, who reported feeling unsafe for a variety of reasons related to their race, sexual orientation, or both. These results further demonstrate that verbal and physical harassment are common experiences for GLBQ students and that a majority feel unsafe, with many skipping school because they are too afraid to go (Kosciw).

Negative school climate directly impacts school performance, grade-point average (GPA) and college aspirations (Kosciw, 2004). The GLSEN study found that students who were frequently harassed had GPAs more than 10% lower than those who were not. Also, sexual minority students experiencing frequent verbal harassment were less likely than other sexual minority students to plan to attend college. 13.4% of GLBQ students reporting verbal harassment had no plans to go to college as compared with only 6.7% of those GLBQ students reporting rare or less frequent verbal harassment.

However, such negative attitudes, feelings, and behaviors by teachers and peers do not only impact sexual minority students. Poteat and Espelage (2007) assessed the effects of homophobic victimization on indicators of psychological and social distress for all students, regardless of sexual orientation, over a one-year period. They found that homophobic victimization significantly predicted increased anxiety and depression, personal distress, and lower sense of school belonging in males and higher levels of withdrawal in females.

Teacher Attitudes Toward Minority Youth. The number of culturally and linguistically diverse (CLD) students in United States schools is increasing. Minorities overall constitute a growing percentage of the U.S. population, with predictions that 46% of the school population by 2020 will be non-White (Banks, 2001). Similar to their lack of experience with sexual minority youth, many of those entering education have limited knowledge of the experiences, needs, and resources of CLD student populations, including the presence of racism and societal inequity (Sleeter, 2001). Schultz, Neyhart, and Reck (1996) found that preservice student teachers are fairly naïve and have stereotypic beliefs about urban children, such as believing that urban children bring attitudes that interfere with education. Another study found that the majority of preservice teachers believed that the home environment and the parents' lack of value of education are responsible for CLD students' low academic achievement (Cho & DeCastro-Ambrosetti, 2005)

Minority students are aware of their teachers' stereotyped beliefs. A study by Rosenbloom and Way (2004) found that Latino and African American students perceived their teachers as implicitly or explicitly racist or discriminatory. Although students did not necessarily perceive their conflicts with teachers as examples of discrimination, they saw them as unjust and as implicit examples of racism. Participants described their perception of teachers' low academic expectations and stereotypes about behavior problems. They felt that no matter what their actual behavior was in the classroom, they were typically stereotyped by their teachers as problem students. The teachers were generally, in the eyes of the Latino and Black students, uncaring and ineffective. Students felt that a caring teacher would help students when they did not understand the material

and maintain high expectations. Yet teachers were perceived by Black and Latino students as emotionally distant and not committed to education.

Teacher Attitudes Toward Sexual Minority Youth. Currently, the published research examining currently practicing teachers' and preservice teachers' attitudes toward sexual minority youth is very limited, unlike that of teacher attitudes toward other student minority groups. Some research has focused on the attitudes and roles of school counselors in relation to working with and supporting sexual minority youth (Fontaine, 1998; Price & Telljohann, 1991), but similar published research has not occurred with educators.

The exception is a survey by Sears (1991) of prospective teachers' attitudes and feelings about homosexuality, their encounters with homosexuals and homosexuality while high school students, and their knowledge about homosexuality. Two different instruments were used: one to measure attitudes and one to measure feelings. He found that eight out of ten prospective teachers reported negative feelings toward lesbians and gay men. Of these, one third was classified as "high grade homophobics," based on cr Prospective teachers' cumulative knowledge about homosexuality was minimal; most of the participants would have failed the knowledge "test" if passing were to be set at 60% correct. When comparing participants' knowledge about homosexuality, their attitudes about homosexuality, and their feelings toward lesbians and gay men, it was discovered that those teachers who demonstrated the least knowledge harbored the most negative attitudes and were the most homophobic. In addition, teachers pursuing certification in elementary education were more likely to express homophobic feelings and express negative attitudes than those planning to teach in secondary schools. Finally, most

teachers reported that the information provided about this topic in school was neither accurate nor adequate. Nevertheless, those who were exposed to the topic during high school (about 25% of the sample) scored lower on the scales assessing feelings and attitudes about homosexuality, indicating less homophobic and more positive attitudes.

Teacher Impact. With some notable exceptions, school districts represent an almost impenetrable arena of heterosexism because of personal, political, and sometimes legal barriers (Tharinger & Wells, 2000). As previously mentioned, frequently teachers, who spend the most time with students, fail to respond to violence and harassment directed at sexual minority youth. Teachers are either inadequately prepared to handle such situations or are merely unwilling to intervene. A 1995 study of 289 teachers and 52 principals from nine urban, suburban, and rural high schools indicated that teachers were the least willing group to discuss homosexuality with students (Woog, 1995). Thus teachers, who may often serve as additional or substitute parental attachment figures for adolescents, are often not available to sexual minority youth.

However, according to Coleman (1988) supportive teachers and non-family adult role models are important for healthy adolescent development. The previously-mentioned Add Health Study report by Russell and colleagues (2001) noted that sexual minority youth report less positive attitudes about school and more school troubles. This study found that relationships with teachers play a leading role in explaining the school troubles experienced by sexual minority youth, especially those reporting a bisexual orientation. These results give further indication of the importance of having supportive faculty or staff in school for sexual minority youth. Adolescents with positive feelings about their

teachers were significantly less likely than their peers to experience the broad range of school troubles.

According to Kosciw (2004), GLBQ students who can identify supportive faculty or staff do better in school than those who cannot, with GPAs more than 10% higher than their peers. Supportive teachers can help prevent school troubles of sexual minority youth. This finding highlights the need for teachers to have awareness and training to help them be supportive of sexual minority students. The first step in this awareness and training is to ascertain exactly what teachers' attitudes toward sexual minority youth are.

Present Study

The current study is based on and expanded the Sears (1991) study to address the lack of research on teacher attitudes and knowledge about sexual minorities. The use of several outcome variables, including attitudes toward sexual minorities, feelings about sexual minorities, knowledge about homosexuality, and attitudes specifically toward sexual minority students reflected Herek's (1995) broader conceptualization of the components that constitute homophobia and Sears's (1991) distinction between personal feelings and professional beliefs and behavior. The current study continued to examine educator's attitudes, behaviors, and knowledge; however, the participant group was preservice teachers, which added information about an overlooked group of educators who will have significant impacts on sexual minority students in the future. Due to the nature of the study, the focus was on attitudes, feelings, and behaviors toward only gay, lesbian, and bisexual populations (GLB). While research into these factors as they relate to transgender populations is vital, focus on gender identity, in addition to sexual orientation, was beyond the scope of this study.

Research Questions

This study explored the relationships between preservice teacher attitudes, feelings, and knowledge about sexual minority students and anticipated future professional behavior with this population and examined three research questions. First, what are the attitudes, feelings, and knowledge of future teachers about sexual minorities in general? Also, do attitudes and feelings differ based on the sexual minority group (i.e. gay, lesbian, or bisexual)? Yang (1997) noted that most Americans believe homosexuality to be immoral and a threat to societal values. Herek (2002b) found that, although participants reported negative attitudes toward all sexual minority groups, respondents' attitudes toward bisexual men and women were more negative than for all other groups, with the exception of injecting drug users. Overall ratings for bisexual men were somewhat lower than for bisexual women. In addition, Sears's (1991) study found that eight out of ten prospective teachers reported negative feelings toward lesbians and gay men. Therefore, it was hypothesized that the preservice teachers in the current study would hold negative attitudes and feelings toward all sexual minority groups and would show the most negative response to those who identified as bisexual.

Second, does student sexual orientation affect prospective teachers' anticipated behaviors toward that student? Sears's (1991) research has shown that the majority of prospective teachers report negative feelings toward lesbians and gay men in general. His study also found that future teachers reported that they would behave differently toward a gay or lesbian student than toward a heterosexual student. Therefore, it was hypothesized that the prospective teachers in the current study would report less anticipated interaction with and supportive behaviors toward sexual minority students.

Finally, do preservice teacher attitudes, feelings, and/or behaviors vary based on knowledge of homosexuality, friendship with someone in their life who identifies as GLB, frequency of attendance at religious services, certification level sought, sex or ethnicity? Previous research has shown that future teachers' cumulative knowledge about homosexuality was minimal (Sears, 1991); the majority of the participants answered fewer than 60% of the questions correctly. Given that sixteen years have elapsed since Sears's study, it was hypothesized that knowledge would have increased among pre-service teachers. When comparing participants' knowledge about homosexuality, their attitudes about homosexuality, and their feelings toward lesbians and gay men, it was discovered that those teachers who demonstrated the least knowledge harbored the most negative attitudes and were the most homophobic (Sears). Several studies have noted a strong correlation between religiosity and attitudes toward sexual minorities, with those participants who score high on measures of antigay attitudes also being those who are most religious (Hinrichs & Rosenberg, 2002; Snively et al., 2004). In addition, differences were found based on race and certification level sought (Sears). African American participants expressed more negative attitudes toward homosexuality than White participants, and teachers pursuing certification in elementary education were more likely to express homophobic feelings and negative attitudes than those planning to teach in secondary schools. Finally, Sears found that preservice teachers who, as high school students, knew a GLB student or were friends with a person they knew or suspected was GLB reported fewer negative attitudes and feelings than those who did not. For this study, it was hypothesized that significant differences would be found in attitudes, feelings, and anticipated behaviors toward sexual minorities based on

knowledge, familiarity with a GLB-identified person, frequency of religious attendance, certification level, sex, and ethnicity.

Chapter 3

Methods

A multi-page, online survey was used to collect information about participants' attitudes, feelings, knowledge, and anticipated behaviors. Potential participants were identified through their enrollment in Teacher Education courses. They were given information about the website and survey and were invited to participate in the study.

Participants

Participants in this study were 223 students who were enrolled in Teacher Education classes during the fall of 2006 in the College of Education at a large Midwestern university. Seventeen individuals were removed from the final data set because no responses were given for any items. The final 206 participants included students planning to teach a range of ages and subject matter in K-12 schools. Limited demographic information about the entire College of Education student population was available. Available information indicated that 92% of all students admitted to the Teacher Education program for fall 2003 were traditional undergraduates with 8% admitted as post-baccalaureate students. Ninety-six percent of the students in the program were from Michigan and 87% were full-time students. Table 1 compares these population demographics to those of the study sample. There were significantly more post-baccalaureate students represented in the sample for the current study than are in the population as a whole. Prior to participation, each participant had to consent to involvement in the study (see Appendix A).

Table 1

Comparison of Population and Sample Demographics

Demographic	Population (%)	Sample (%)
Undergraduate student	92.0	76.7
Post-baccalaureate student	8.0	17.4
Michigan resident	96.0	93.1

Thirty participants completed all or part the surveys but declined to provide demographic information. Of the final participants who provided demographic information, the majority (n=136) were female, accounting for 78.2% of respondents. Thirty-eight respondents (21.8%) were male. The majority of participants identified as Caucasian/European American/White (n=168), accounting for 81.6% of the sample. Two participants (1.0%) identified as African American/Black, four (1.9%) as Asian/Asian American/Pacific Islander, three (1.5%) as Latino(a)/Hispanic/Puerto Rican, and two (1.0%) as "Other." "Other" responses included "human" and "Italian." Although Native American was also included as a category, no participants selected this as their racial or ethnic identity. The racial/ethnic identity categories were not mutually exclusive; that is, participants could select single or multiple categories of identification or none at all. Relationship status of the sample was: 57.4% (n=101) "single/never married," 34.7% (n=61) "committed relationship/significant other," 6.8% (n=12) "married" and 1.1% (n=2) "divorced." No participants indicated that they were "widowed." Information about the preservice teachers' current level in the teacher education program was also collected. Most of the participants (n=69) were in their senior year of undergraduate work, making up 39.2% of the sample. In addition, 12 participants (6.8%) were freshman, 21 (11.9%)

were sophomores, 33 (18.8%) were juniors, and 31 (17.4%) were post-BA teacher interns. Seven participants (4.0%) reported being graduate students and three (1.6%) reported being Lifelong Education students (e.g. second Bachelor's degree).

Participants were asked about the certification level they were currently pursuing. The majority (n=75), or 43.1%, was training in elementary education. An additional 71 participants (40.8%) were training in secondary education. Other certification levels were K-12 (n=19), making up 10.9% of the sample, and early childhood (n=9), making up 5.1% of the sample. Most of the participants (n=142) were training to be general education teachers, making up 80.7% of the sample. In addition, 20 participants (11.4%) were training for special education. Various other certification areas were also represented, including physical education, vocational education, administration, and support personnel. Table 2 presents complete demographic information for the sample.

Table 2

Participant Demographics

Demographic	*n*	Percent
Sex		
Female	136	78.2
Male	38	21.8
Race/Ethnicity		
African American/Black	2	1.0
Asian American/Asian/Pacific Islander	4	1.9
Caucasian/European-American/White	168	81.6
Latino(a)/Hispanic/Puerto Rican	3	1.5
American Indian/Native American	0	0.0
Other	2	1.0
Relationship Status		
Single/Never Married	101	57.4
Committed Relationship/Significant Other	61	34.7
Married	12	6.8
Divorced	2	1.1
Widowed	0	0.0
Class Level		
Freshman	12	6.8
Sophomore	21	11.9
Junior	33	18.8
Senior	69	39.2
Post-BA/Fifth-year intern	31	17.4
Graduate Student	7	4.0
Lifelong Education	3	1.6
Certification Level		
Elementary Education	75	43.1
Secondary Education	71	40.8
Early Childhood	9	5.1
K-12	19	10.9
Certification Area		
General Education	142	80.7
Special Education	20	11.4
Physical Education	8	4.5
Vocational Education	3	1.7
Administration (e.g. principal, superintendent)	1	0.6
Support Position (e.g. counselor, psychologist)	2	1.1

The participants ranged in age from 17 to 36. The mean age of the total sample was 21.50 with a standard deviation of 2.82. The median age of the total sample was 21.00 years old. The modal age of the total sample was also 21.00 years old. The 136 female participants had a mean age of 21.49 with a standard deviation of 2.89. The median age for the female participants was 21.00 years old, and the modal age was also 21.00 years old. The 38 male participants had a mean age of 21.42 with a standard deviation of 2.62. The median age for the males was 21.00 years old, and the modal age was 22.00 years old. Table 3 provides a summary of the age of the participants by sex.

Table 3

Age of Participants

Sex	*n*	M	*SD*	Median
Female	136	21.49	2.89	21.00
Male	38	21.42	2.62	21.00
Transgender	0	-	-	-
Total	174	21.50	2.82	21.00

Note. Age range was 17 to 36 years old

To ensure compliance with the Institutional Review Board approval, participants were asked to identify their university of attendance. All participants (n=206), 100% of the sample, reported currently attending the university where data collection occurred. Participants were also asked about their state (if residents of the United States) or country of legal residence. Most participants (n=163), 93.1%, were residents of Michigan; this is

similar to the population (92.0%) from which the sample was selected. Only one respondent (0.6%) was from another country, Canada. Respondents were also from the following states: two (1.1%) from Illinois, four (2.3%) from New York, one (0.6%) from Ohio, and one (0.6%) from Virginia. Three respondents (1.7%) reported being only from the United States with no state specified.

As part of the demographic questionnaire, participants were also asked to identify their sexual orientation in two dimensions. The first asked them to select the direction, along a continuum from "other sex only" to "same sex only," of their sexual, physical, and emotional attractions, fantasies, preferences, and behaviors. The second asked how the participant identified/labeled his or her sexual orientation. For the first area, the majority (n=124) indicated attractions, fantasies, preferences, and behaviors only for the other sex, making up 70.5% of the responses. In addition, 31 participants (17.6%) reported being attracted mostly, but not exclusively, to the other sex, and 4 (2.3%) reported attraction to the other sex somewhat more. One participant identified attractions, fantasies, preferences, and behaviors (0.6%) toward both sexes equally. Also, 6 participants (3.4%) reported attractions mostly to the same sex and 10 (5.7%) reported exclusively same-sex attractions, fantasies, preferences, and behaviors. For the second area, the majority of respondents (n=169) identified as heterosexual, accounting for 96.0% of the sample, with an additional 3 participants (1.7%) identifying as bisexual, 1 (0.6%) as gay/lesbian/homosexual, and 3 (1.7%) as unsure of or questioning their self-identification. Tables 4 and 5 provide summaries of the directions of attractions and the self-identification of sexual orientation of the participants.

Table 4

Direction of sexual, physical, and emotional attractions, fantasies, preferences, and behaviors

Direction	*n*	Percent
Other sex only	124	70.5
Other sex mostly	31	17.6
Other sex somewhat more	4	2.3
Both sexes equally	1	0.6
Same sex somewhat more	0	0.0
Same sex mostly	6	3.4
Same sex only	10	5.7

Table 5

Sexual Orientation Self-Identification

Direction	*n*	Percent
Heterosexual/Straight	169	96.0
Homosexual/Gay/Lesbian	1	0.6
Bisexual	3	1.7
Unsure/Questioning	3	1.7

Participants were also asked about frequency of attendance at religious services. Most respondents indicated attending services at least occasionally, although the frequencies varied. Fifty-nine participants (28.6%) reported attending once a month, twenty-one (10.2%) attend several times a month, and twenty-nine (14.1%) attend once a week or more than once a week. Sixty-seven participants (32.5%) reported that they never attended religious services. Table 6 provides a summary of the frequency of religious service attendance reported by participants.

Table 6

Frequency of Religious Service Attendance

Religious Attendance Frequency	*n*	Percent
Never	67	38.1
Once a month	59	33.5
Several times a month	21	11.9
Once a week or more than once a week	29	16.5

The final portion of the demographic survey posed four additional questions to the participants: 1) "I am friends with someone who is 'gay male', 'lesbian', or 'bisexual,'" 2) "I have a family member who is 'gay male', 'lesbian', or 'bisexual,'" 3) "I have had a college course dealing exclusively with diversity and multicultural issues, including sexual orientation," and 4) "I believe that having an understanding of homosexuality is important in my professional development since I may be working directly with people who are homosexual." Questions one, two, and three also included open-ended responses

for participants who answered "yes" to each to indicate the approximate number of friends and/or family who identify as sexual minorities and the courses taken that included diversity topics. For question one, 146 participants (83.0%) answered "yes" and 30 participants (17.0%) answered "no." The number of GLB friends reported by the participants who answered "yes" ranged from 1 to 40, with a mean of 4.19. The most frequently reported (mode) number of friends was 2. On question two, 44 participants (25.1%) answered "yes" and 131 participants (74.9%) answered "no." Of those responding in the affirmative, the number of reported GLB family members ranged from one to four, with a mean of 1.28 family members and a mode of 1 family member. For question three, 104 participants (59.1%) reported having taken a college course that dealt exclusively with diversity and multicultural issues, including sexual orientation, while 72 (40.9%) reported having not taken such a class. Of those who reported having taken a class addressing diversity, the course areas included teacher education, counseling and educational psychology, English, sociology, family and child ecology, and integrative studies in social sciences (general education social science courses for non-social science majors). Finally, on question four, 160 participants (90.9%) reported believing that having an understanding of homosexuality was important to their professional development as an educator while 4 participants (2.3%) did not believe this and 12 (6.8%) were unsure of the importance of this area to their professional development. Table 7 summarizes the responses to these four items.

Table 7

Supplemental Questions Response Frequency

	Yes		No		Unsure	
Question	*n*	P	*n*	P	*n*	P
"I am friends with someone who is 'gay male', 'lesbian', or 'bisexual'."	146	83.0	30	17.0	-	-
"I have a family member who is 'gay male', 'lesbian', or 'bisexual'."	44	25.1	131	74.9	-	-
"I have had a college course dealing exclusively with diversity and multicultural issues, including sexual orientation."	104	59.1	72	40.9	-	-
"I believe that having an understanding of homosexuality is important in my professional development since I may be working directly with people who are homosexual."	160	90.9	4	2.3	12	6.8

Measures

Multiple measures were used for data collection to obtain more information about preservice teachers' attitudes, feelings, and anticipated behaviors toward both sexual minorities in general and sexual minority youth in schools. Information about each of the instruments is included below.

Attitudes Toward Lesbians and Gay Men Scale-Revised (Herek, 1994). Future teachers' attitudes toward sexual minorities were examined using an adaptation of the Attitudes Toward Lesbians and Gay Men Scale - Revised (ATLG-R; Herek, 1994), which is comprised of two subscales, attitudes toward gay men (ATG-R) and attitudes toward lesbians (ATL-R). To compare participants' attitudes toward gay men with their attitudes

toward lesbians, a parallel form of the ATG-R subscale was used in reference to lesbians, as suggested by the original author of the ATLG scale (Herek, 1998). This instrument consists of 20 statements, 10 about gay men and 10 about lesbians (see Appendix B). The 20 items are scored on a seven-point Likert-type scale with anchor points of *strongly disagree* and *strongly agree*. Several items were reverse scored and then the responses summed to give the participant an overall attitude score, ranging from 20 (extremely positive attitudes) to140 (extremely negative attitudes), with ATL-R and ATG-R subscale scores ranging from 10 to 70.

The ATLG-R has been widely used in research investigations of heterosexuals' attitudes toward sexual minorities and has consistently shown high reliability (α=.85 for the subscales to α =.90 for the full scale) and construct validity (Haslam & Levy, 2006; Herek 1988, 1994; Herek & Capitanio, 1996). For the current study, Cronbach's coefficient alpha was used to measure the scale's reliability, or the extent to which items that comprise the scale measure the same underlying construct. The full scale (including all 20 items) had the strongest reliability (α = .959). The reliabilities for the two individual scales (each having 10 items) were: ATG-R (α = .920) and ATL-R (α = .921).

Attitudes Regarding Bisexuality Scale (Mohr & Rochlen, 1999). Future teachers' attitudes toward bisexuals were examined using the Attitudes Regarding Bisexuality Scale (ARBS; Mohr & Rochlen, 1999). The ARBS is designed to assess two dimensions of attitudes toward bisexual women and men: tolerance and stability. Tolerance, the first dimension, relates to the degree to which bisexuality is viewed as acceptable and morally tolerable (Mohr & Rochlen). The researchers' work has indicated that this dimension is highly correlated with measures of attitudes toward gay men and lesbians. Stability, the

second dimension, refers to the degree to which bisexuality is viewed as a legitimate, stable sexual orientation. Three forms of the ARBS have been developed (Mohr & Rochlen). The ARBS-Female/Male version (ARBS-FM) targets both female and male bisexuality in a single measure, whereas the ARBS-Female version (ARBS-F) and ARBS-Male version (ARBS-M) target only female or male bisexuality, respectively. The ARBS-F and ARBS-M are identical, except for the gender of the attitude target. In order to compare attitudes toward bisexual men with those toward bisexual women, this study used both the ARBS-M and ARBS-F.

Each instrument consists of 12 statements, and both contain the same questions, with the difference being the target of male or female bisexuals (see Appendix C). For this study, the two individual scales were combined into one measure, with all of the items on the ARBS-M being presented first, followed immediately by the items on the ARBS-F. The 24 total items are scored on a five-point Likert-type scale with anchor points of *strongly disagree* and *strongly agree*. Necessary item responses were reverse scored and then the responses summed and averaged for each scale to give the participant a score on each of the two dimensions, tolerance and stability.

The ARBS has been more recently developed but has shown high reliability (ranging from α =.85 to α=.93 for the subscales). Convergent validity was established by examining correlations of the subscales of all three versions (ARBS-FM, ARBS-M, and ARBS-F) with a measure of attitudes toward lesbians and gay men (Mohr & Rochlen, 1999). Construct validity has also been established, based on the relationship of all three versions of the scale to a number of demographic categorical variables shown to be associated with attitudes toward lesbians and gay men, including political affiliation,

race, and religious attendance (Mohr & Rochlen). For the current study, reliability analyses for the full scale of twenty items (ARBS) showed strong reliability (α = .963). The reliabilities for the two individual scales (each having 10 items) were: ARBS-M (α = .922) and ARBS-F (α = .936).

Index of Homophobia (Hudson & Ricketts, 1980). Feelings towards gay and lesbian persons were examined using the Index of Homophobia (IHP; Hudson & Ricketts, 1980). The IHP is a scale consisting of 25 questions measuring affective responses toward persons who are gay (see Appendix D). Respondents endorsed items on a five-point Likert-type scale by selecting one of five response options (*5=strongly disagree, 4=disagree, 3=neither agree nor disagree, 2=agree, 1=strongly agree*). Areas of inquiry focus on affective responses (disgust, anxiety, discomfort, fear, and anger) when in close or distant proximity (physical and social) to persons who are gay, in a variety of environments. Examples of scale items are "It would not bother me to walk through a predominantly gay section of town" and "I would feel comfortable working closely with a female homosexual." After reverse scoring appropriate questions and summing all the individual items, the total score is a measure of self-reported homophobia on a scale from 0-100, with lower scores indicating less homophobia. Hudson and Ricketts (1980) classified respondents in four categories: "high grade homophobic" for those with scores from 76 to 100, "low grade homophobic" for those with scores from 51 to 75, "low grade non-homophobic" for those with scores from 26 to 50, and "high grade non-homophobic" for those with scores from 0 to 25. Persons with highly negative affective responses tend to obtain very high scores and vice versa. Studies have reported that the scale is reliable, with coefficient alphas ranging from 0.90

to 0.95 with diverse samples (Hudson & Ricketts, 1980; Pagtolun-An & Clair, 1986). In the current study, analyses for the IHP also showed strong reliability (α = .947).

Anticipated Behaviors of Future Teachers Toward Sexual Minority Youth Scale (ABFTS). Future teacher anticipated behaviors toward sexual minority students in particular were measured using the Anticipated Behaviors of Future Teachers Toward Sexual Minority Youth Scale (ABFTS). This instrument, created by the researcher specifically for use in this study, consists of two parts: 1) Part A includes 23 statements relating to a vignette presented to each participant. These statements assess teacher behavior and are derived from a number of different research instruments and from the literature on the relationship between attitudes and behavior; and 2) Part B includes 27 statements related to more general classroom behaviors to encourage diversity and educate students, especially related to sexual minorities (see Appendices E & F). All of the 50 items (parts A & B combined) are scored on a five-point Likert-type scale with anchor points of *5 = very likely* and *1 = very unlikely*, in reference to the likelihood of doing each of the behaviors listed. Examples of survey items are: 1) Part A: "I would reassure this student that this is a phase that will be outgrown" & 2) Part B: "I would modify my curriculum for diversity by including sexual orientation." Reverse scored items were appropriately recoded and responses to each of the statements were summed to give the subject an overall behavioral likelihood score. Reliability analyses for the current study showed strong reliability for the combined scale, which included all 50 items (α = .886), as well as acceptable reliabilities for the individual scales: part A (α = .714) and part B (α = .883)

Knowledge about Homosexuality Questionnaire (Harris, 1998). Preservice teachers' knowledge about homosexuality was assessed using a slightly-modified version of the Knowledge about Homosexuality Questionnaire (KAH; Harris, 1998). This instrument consists of 18 true-false factual statements and intends to measure factual knowledge rather than evaluative opinions (see Appendix G). A slightly modified form of the original instrument, developed and used by Koch (2000), which removes two questions, updates some of the language in the questions, and adds a third response option ("Don't Know") was used in this study to more accurately reflect participants' true knowledge. The total number of correct responses is counted, with omissions scored as incorrect. This procedure produces possible scores ranging from 0 to 18.

The Knowledge about Homosexuality Questionnaire has been used in research investigations of the accuracy of nurses', psychologists', and social workers' knowledge about homosexuality. It has shown high internal consistency with a sample of educators (α =.86) and construct validity indicating that people with more relevant education score higher on the instrument (Bliss & Harris, 1999; Koch, 2000). The internal consistency for the current study was slightly lower than previous studies (α = .663)

Demographic Questionnaire. The final part of the survey was a demographic questionnaire (see Appendix H). Questions assessed participants' age, sex, race, relationship status, desired certification level and area, class standing, university of attendance, state of legal residence, sexual orientation and self-identification, and frequency of religious attendance (never, once a month, several times monthly, or weekly or more than once a week). Additional questions also inquired as to whether participants had friends or family members who identify as gay, lesbian, or bisexual, and, if so, the

number of friends and family, as well as to whether participants had taken any college classes that included diversity topics, specifically relating to sexual orientation.

Procedures

A multiple-page website containing the informed consent, ATLG-R, ARBS, KAH, ABFTS, IHP, and the participant demographic sheet was created and tested to prevent any technical problems. Eight courses required as part of the undergraduate Teacher Education program were identified. The researcher contacted all sections of these classes to describe the nature of the study, recruit participants, and provide information about the web-based format of the study, along with directions about how to access the survey. Teacher education classes were targeted to ensure that students were planning to become teachers. Approximately 730 students received information about this study; however, the exact number of potential participants cannot be known because some students were enrolled in more than one of the courses, and, in order to maintain anonymity, the names of students were not collected. Therefore, duplicate names could not be identified and removed from the final count. All survey data were collected anonymously online, with participants randomly assigned to one of four vignette groups for the ABFTS (gay male student, lesbian student, bisexual student, or heterosexual student) based on the last two digits of their telephone number. It is hoped that the anonymity encouraged participants to respond honestly to survey questions. Participants were asked to read the consent form online before beginning and indicated consent to participate by agreeing to the consent statement and proceeding to the rest of the survey. Upon completion of the surveys, each participant was given the opportunity to enter his or her email address to receive a $5 gift card. All email addresses were stored separately

from survey data and could not be linked to individual responses. Of the approximately 730 students who received the study information, 226 consented to participate giving a response rate of about 31%

Research Design and Analyses

This study used a correlational design to examine attitudes, feelings, and knowledge of future teachers. A correlational design is used for two reasons. Primarily, the variables in the study (i.e., sex, ethnicity, relationships with sexual minorities, attitudes toward sexual minorities, feelings about sexual minorities, anticipated behavior toward sexual minority students, and knowledge of homosexuality) are factors that could not be immediately manipulated. Many of the outcome variables focus on preservice teachers' attitudes, feelings, and anticipated behaviors, making them beyond the control of the researcher. Therefore, they could best be explored by using a self-report measure rather than a true experimental design. Correlations, t-tests, and analysis of variance (ANOVA) were performed to examine the relationship between the variables.

This body of research (i.e., preservice teacher attitudes toward sexual minority youth) is still developing. While attitudes of the general population and of college students in particular are more well-known, there is surprisingly little research examining this population, preservice teachers. As such, it was appropriate to use methods and research designs (such as correlational designs drawing from surveys) in a newly developing area to better understand relationships between variables (Schmitt, 1994).

Chapter 4

Results

The overarching purpose of this study was to examine future educators' attitudes, behaviors, and knowledge with an often-overlooked participant group, preservice teachers, who will have a significant impact on sexual minority students in the future. Several outcomes were investigated: attitudes, feelings, and behaviors toward gay, lesbian, and bisexual populations, including youth. Also, this study examined the relationship between these outcomes and multiple factors, including knowledge of homosexuality, friendship or familial relationship with someone who identifies as GLB, frequency of attendance at religious services, certification level sought, sex and ethnicity. The researcher conducted a series of correlations, t-tests, and ANOVAs to examine the relationships between these variables. All survey data were analyzed using SPSS.

Research Question One: Attitudes, Feelings, and Knowledge

The first research question explored was: what are the attitudes, feelings, and knowledge of future teachers about sexual minorities in general? And, do attitudes and feelings differ based on the sexual minority group (i.e. gay, lesbian, or bisexual)? To answer the first part of this question, descriptive statistics were calculated for all three areas, based on responses on the corresponding surveys (ATLG-R, ARBS, IHP, and KAH). Table 8 summarizes the descriptive statistics for all four measures. For the second part of this question, subscales from the surveys were compared to evaluate if significant differences in attitudes existed between sexual minority groups.

Table 8

Descriptive Statistics for Measures of Attitudes, Feelings, and Knowledge

Scale	M	*SD*	Median
ATLG-R	47.77	25.45	41.50
ATG-R	22.56	12.63	21.00
ATL-R	22.30	12.42	21.00
ARBS	91.51	20.30	94.50
ARBS-M	45.61	10.06	47.00
ARBS-F	45.90	10.57	47.50
IHP	32.07	18.79	31.00
KAH	10.88	3.29	11.00

Attitudes toward sexual minorities. To evaluate overall attitudes toward sexual minorities, ratings on the corresponding surveys were investigated. On the ATLG-R, which measures degree of acceptance of lesbian- and gay-identified people, scores can range from 20 (extremely positive attitudes) to 140 (extremely negative attitudes). When analyzing this survey information, participants who responded that they identified as gay, lesbian, or bisexual were excluded because the ATLG-R was designed to measure the attitudes of people who identify as heterosexual. To qualify scores, six categories were created: extremely positive (20-40), moderately positive (41-60), somewhat positive (61-80), somewhat negative (81-100), moderately negative (101-120), and extremely negative (121-140). The range of total ATLG-R scores for all participants was from 20 to 140, with a mean of 47.77 (*SD*=25.45), indicating that respondents generally reported moderately positive attitudes toward sexual minorities. This finding is contrary to

previous research and to the hypothesis that participants would hold negative attitudes toward sexual minorities. Figure 1 shows the distribution of ATLG-R scores. About 13.2% (n=22) of the 172 respondents reported some degree of negative attitudes toward sexual minorities, while the remaining 86.8% (n=150) expressed some degree of positive attitudes.

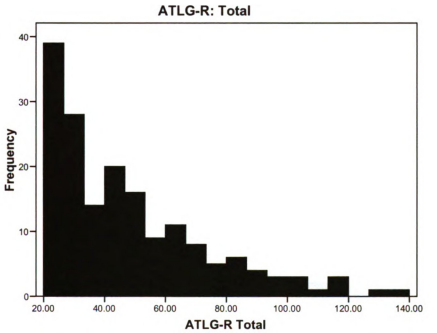

Figure 1. Distribution of attitude scores toward gay men and lesbians as measured by the ATLG-R.

The subscales were also analyzed independently of the combined scale. The range of scores for both the ATL-R and ATG-R was 10 to 70. A paired-samples t-test was conducted to compare attitudes toward gay men and toward lesbians. There was no significant difference in reported attitudes toward gay men (M=22.56, SD=12.63) and lesbians [M=22.30, SD=12.42; $t(160)$=-.80, p=.42]. The magnitude of the difference in the means was very small (eta squared = .004).

On the ARBS, which assesses participants' attitudes toward bisexual women and men, scores can range from 24 (negative attitudes) to 120 (positive attitudes). The range of scores for current participants was from 36 to 120 with a mean of 91.51 (*SD*=20.30), indicating that respondents generally reported positive attitudes toward people who are bisexual. Figure 2 shows the distribution of ARBS scores.

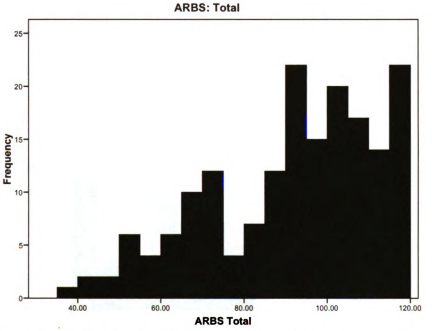

Figure 2. Distribution of attitude scores toward bisexual men and women as measured by the ARBS.

The male and female versions of the ARBS were examined independently. The range of scores for both the ARBS-M and ARBS-F was 12 to 60. A paired-samples t-test was conducted to compare attitudes toward men who identify as bisexual and women who identify as bisexual. There was no significant difference in reported attitudes toward bisexual males (*M*=45.61, *SD*=10.06) and bisexual females [*M*=45.90, *SD*=10.57;

$t(175)=-1.01$, $p=.31$]. The magnitude of the difference in the means was very small (eta squared =.006).

Feelings about sexual minorities. To evaluate participants' feelings toward sexual minorities, responses on the IHP were examined. The IHP measures affective responses (e.g. anxiety, discomfort, fear, disgust) toward persons who are gay. Total scores can range from 0-100, with lower scores indicating less homophobia. In this study, scores ranged from 0 to 96, with a mean of 32.07 (SD=18.79). The distribution of scores is shown in Figure 3.

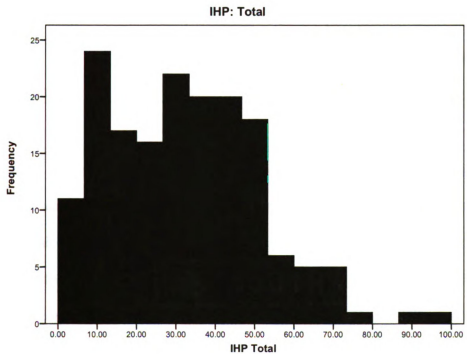

Figure 3. Distribution of feeling scores toward sexual minorities as measured by the IHP.

Using Hudson and Ricketts (1980) four-category classification for respondents: "high grade homophobic" for those with scores from 76 to 100, "low grade homophobic"

for those with scores from 51 to 75, "low grade non-homophobic" for those with scores from 26 to 50, and "high grade non-homophobic" for those with scores from 0 to 25, the majority of participants reported feelings in the low-grade non-homophobic range. Table 9 shows the frequencies of participant response for each descriptive category.

Table 9

IHP Score Frequencies (N = 167)

Score Range	*n*	Percentage	Classification (Hudson & Ricketts, 1980)
0-25	63	37.7	High grade non-homophobic
26-50	79	47.3	Low grade non-homophobic
51-75	23	13.8	Low grade homophobic
76-100	3	1.8	High grade homophobic

Knowledge about sexual minorities. To evaluate participants' knowledge about homosexuality, responses on the KAH were evaluated. This instrument consists of 18 true-false factual statements and intends to measure factual knowledge rather than evaluative opinions. Total scores may range from 0 to 18, with higher scores indicating more correct responses and greater knowledge. Participants' scores ranged from 1 to 18, with a mean of 10.88 (*SD*=3.29). Figure 4 shows the distribution of the number of correct responses.

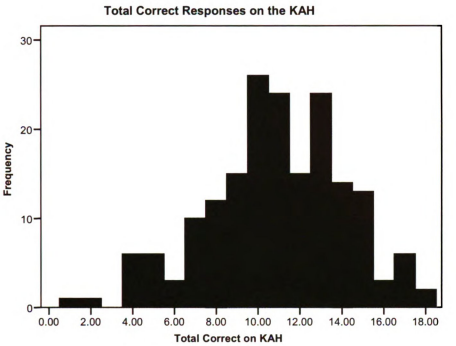

Figure 4. Distribution of correct responses on the KAH.

If 60% correct was set to be the minimum to "pass" the knowledge test, as in previous research, nearly half of the participant sample (44.2%) would not have passed. Only 13.3% of the sample answered more than 80% or more of the questions correctly. Table 10 shows the distribution of participant responses for each question.

Table 10

Percent of Participants Responding for Each KAH Question (N=181)

Question	True	False	Unsure
1. Homosexuality is a phase which children outgrow	1.1	**84.5**	14.4
2. There is a good chance of changing homosexual persons into heterosexual men and women	3.9	**82.3**	13.8
3. Most homosexuals want to be members of the opposite sex	3.3	**75.7**	21.0
4. Some church denominations have condemned legal and social discrimination against homosexuals	**65.2**	3.3	31.5
5. Sexual orientation is established at an early age	**53.0**	11.0	35.9
6. According to the American Psychological Association, homosexuality is an illness	7.2	**50.3**	42.5
7. Homosexual males are more likely to seduce young boys than heterosexual males are to seduce young girls	6.1	**66.3**	27.6
8. Gay men are more likely to be victims of violent crime than the general public	**68.0**	9.4	22.7
9. A majority of homosexuals were seduced in adolescence by a person of the same sex, usually several years older	9.4	**49.2**	41.4
10. A person becomes homosexual (develops a homosexual orientation) because he/she chooses to do so.	15.5	**64.1**	20.4

Table 10 (continued)

Question	True	False	Unsure
11. Homosexual activity occurs in many animals	**41.4**	12.2	46.4
12. Kinsey and many other researchers consider sexual behavior as a continuum from exclusively homosexual to exclusively heterosexual	**31.7**	1.7	66.7
13. A homosexual person's gender identity does not agree with his/her biological sex	17.9	**47.5**	34.6
14. Historically, almost every culture has evidenced widespread intolerance toward homosexuals, viewing them as "sick" or as "sinners"	40.8	**26.8**	32.4
15. Heterosexual men tend to express more hostile attitudes toward homosexuals than do heterosexual women	**68.2**	7.3	24.6
16. "Coming out" is a term that homosexuals use for publicly acknowledging their homosexuality	**95.0**	1.7	3.3
17. Bisexuality can be characterized as sexual behaviors and/or responses to both males and females	**90.6**	1.1	8.3
18. Recent research has shown that homosexuality may be linked to chromosomal differences	**31.1**	5.6	63.3

Note. Correct answer is indicated in bold.

Research Question Two: Student Sexual Orientation and Anticipated Behaviors

The second research question addressed in this study was: does student sexual orientation affect prospective teachers' anticipated behaviors toward that student? To evaluate this question, the Anticipated Behaviors of Future Teachers Toward Sexual Minority Youth Scale (ABFTS) was used. A one-way between-groups analysis of variance was conducted to explore the impact of sexual minority group on preservice teachers' anticipated behaviors, as measured by the ABFTS. Participants were randomly assigned to one of four groups and presented the corresponding student vignette (Group 1: heterosexual student; Group 2: gay male student; Group 3: lesbian student; Group 4: bisexual student). There was a statistically significant difference in ABFTS scores for the four groups [$F(3, 190)=8.23$, $p<.0005$]. The magnitude of difference in mean scores between the four groups was medium to large, as indicated by the effect size (eta squared=.12). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M=85.51$, $SD=6.14$) was significantly different from Group 2 ($M=91.85$, $SD=9.02$), Group 3 ($M=92.83$, $SD=8.47$), and Group 4 ($M=92.88$, $SD=7.03$). Groups 2, 3, and 4 did not significantly differ from each other.

Additional questions on the ABFTS explored future teachers' anticipated curriculum inclusion and classroom behaviors surrounding sexual orientation. 30% of the sample reported that they either disagreed with or were neutral toward the statement, "I would discuss homosexuality in a positive way if the subject came up in my classroom." About 1 in 3 future teachers (32.8%) reported that, regardless of the circumstances, they would not discuss homosexuality in the classroom. In order to ascertain if this reluctance may be due to a lack of information, participants were also asked how reluctant they

would be to talk about homosexuality in the classroom, even with sufficient training. Almost half of the sample (49.7%) responded that they were neutral toward or that they agreed with the statement, "Even if I had sufficient training, I would still be reluctant to talk about homosexuality in the classroom." Rather than addressing student questions about sexual orientation, the majority of participants responded that they would instead refer the student to the school counselor or psychologist. 92.4% of participants provided an affirmative or neutral response to the statement, "I would refer a student to the counselor or school psychologist if she/he had questions about sexual orientation." Even though they would refer students to another school professional, future teachers also expressed a willingness to gain more information about supporting sexual minority students. The majority of the sample (81.3%) responded in the affirmative to the statement, "I would ask a more knowledgeable person (e.g. school counselor, school psychologist) for information about supporting gay, lesbian, and bisexual students."

Finally, participant responses to questions about inclusion of topics of race and ethnicity and topics of sexual orientation in the classroom were compared to examine whether differences existed between future teachers' willingness to discuss such topics in their future work. There was a significant difference in reported inclusion of topics on race and ethnicity (M=4.20, SD=0.94) and sexual orientation [M=2.66, SD=1.18; $t(196)$=-18.41, $p<.0005$]. Participants reported a greater willingness to include topics of race and ethnicity in the curriculum than topics of sexual orientation.

Research Question Three: Factors Affecting Attitudes, Feelings, and Behaviors

The final research question addressed in this study was: do preservice teacher attitudes, feelings, and/or behaviors vary based on knowledge of homosexuality,

friendship with someone in their life who identifies as GLB, frequency of attendance at religious services, certification level sought, sex or ethnicity? To evaluate this question, the demographic information provided was compared with participants' reported attitudes, feelings, and anticipated behaviors. The relationship between knowledge (as measured by the KAH) and attitudes (as measured by the ATLG-R), feelings (as measured by the IHP), and anticipated behaviors (as measured by the ABFTS) was investigated using Pearson product-moment correlation coefficients. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. There was a strong, negative correlation between knowledge and attitudes [$r=-.50$, $n=178$, $p<.0005$], with greater knowledge associated with less negative attitudes toward sexual minorities. Also, there was a moderate, negative correlation between knowledge and feelings [$r=-.44$, $n=167$, $p<.0005$], with greater knowledge associated with less negative feelings about sexual minorities. Greater knowledge was also associated with more positive anticipated behaviors toward sexual minority students[$r=.33$, $n=206$, $p<.0005$] and with more inclusive curriculum practices [$r=.39$, $n=183$, $p<.0005$]. Table 11 shows the correlations between knowledge, attitudes, feelings, and anticipated behaviors.

Table 11

Pearson Product-Moment Correlations Between Knowledge, Attitudes, Feelings, and Anticipated Behaviors

Measure	1	2	3	4	5
(1) KAH	-	-	-	-	-
(2) ATLG-R	-.50*	-	-	-	-
(3) IHP	-.44*	.84*	-	-	-
(4) ABFTS Part 1	.33*	-.45*	-.29*	-	-
(5) ABFTS Part 2	.39*	-.74*	-.70*	.41*	-

Note. KAH=Knowledge about Homosexuality Questionnaire; ATLG-R=Attitudes Toward Lesbians and Gay Men - Revised Scale; IHP=Index of Homophobia; ABFTS=Anticipated Behaviors of Future Teachers Toward Sexual Minority Youth Scale

*p<.0005

Impact of friendship with sexual minorities. A series of independent samples t-tests were conducted to compare attitudes, feelings, and anticipated behaviors between participants who have at least one GLB-identified friend and those who have no GLB-identified friends. There was a significant difference in reported attitudes of participants (as measured by the ATLG-R) who have at least one GLB-identified friend (M=41.95, SD=22.24) and of those who do not [M=59.19, SD=31.73; $t(160)$=-2.65, p=.01]. However, despite the significance, the magnitude of the difference in the means was small (eta squared =.04).

There was also a significant difference in reported feelings toward sexual minorities (as measured by the IHP) of participants who have at least one GLB-identified friend (M=28.98, SD=17.60) and of those who do not [M=46.00, SD=17.78; t(163)=-4.59, p<.0005]. Participants with at least one sexual minority friend had much more positive feelings toward sexual minorities than did those with no sexual minority friends. The magnitude of the difference in the means was moderate to large (eta squared =.11).

Finally, there was a difference in both future teachers' anticipated behaviors toward sexual minority students (as measured by part 1 of the ABFTS) and in curriculum practices (as measured by part 2 of the ABFTS). Participants with at least one GLB-identified friend reported more positive anticipated behaviors (M=92.09, SD=10.31) from those with no GLB friends [M=87.87, SD=8.83; t(174)=2.09, p=.038]. The magnitude of the difference in the means was small (eta squared =.02). Participants with at least one GLB-identified friend also reported more inclusive curriculum practices related to sexual minorities (M=109.56, SD=11.58) than did those with no GLB friends [M=103.04, SD=13.56; t(159)=2.63, p<.01]. However, the magnitude of the difference in the means was small (eta squared =.04).

Impact of frequency of religious attendance. One-way analysis of variance (ANOVA) was used to determine the impact of frequency of attendance at religious services on attitudes (as measured by the ATLG-R), feelings (as measured by the IHP), and anticipated behaviors (as measured by the ABFTS). Participants selected how often they attended religious services and were placed into one of four groups based on their response (Group 1: never attend religious services; Group 2: attend religious services once a month; Group 3: attend religious services several times a month; Group 4: attend

religious services once a week or more than once a week). In the first ANOVA, which examined the impact of religious attendance on attitudes, the homogeneity of variance assumption was violated (Levene's Statistic=7.20, $p<.0005$). However, using the Welch test, which accounts for the violation of this assumption, there was still a statistically significant difference in attitude scores for the four groups [$F(3, 53)=13.11$, $p<.0005$]. This indicates that participants' reported frequency of attendance was related to their attitudes toward sexual minorities. The magnitude of difference in mean scores between the four groups was large, as indicated by the effect size (eta squared=.28). Post-hoc comparisons using the Tukey Honestly Significant Difference (HSD) test indicated that the mean score for Group 1 (M=34.27, SD=15.07) was significantly different from Group 2 (M=45.67, SD=22.48) and that the mean scores for Group 1, Group 2, and Group 3 (M=40.26, SD=19.60) were all significantly different from Group 4 (M=72.80, SD=31.17). Groups 1 and 3 and Groups 2 and 3 did not significantly differ from each other. Overall, these differences indicate that those participants who reported attending religious services at least once a week, or more, were significantly more likely to hold negative attitudes toward sexual minorities. Figure 5 shows the ATLG-R means plot for the four groups.

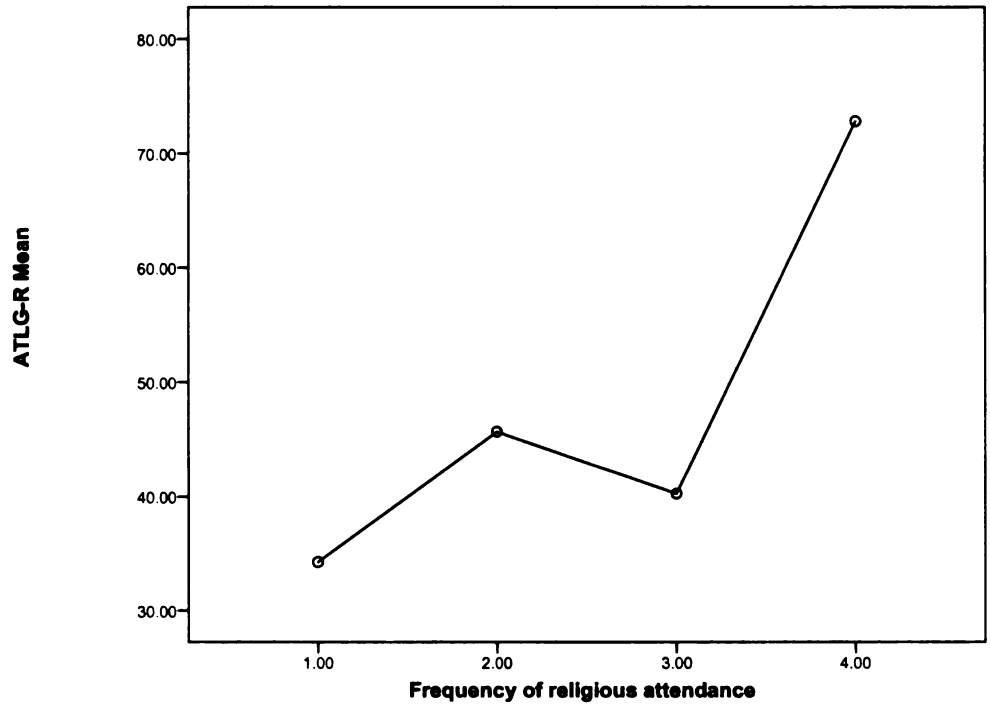

Figure 5. Plot of ATLG-R means by frequency of religious attendance

In the second ANOVA, which examined the impact of religious attendance on reported feelings toward sexual minorities, there was a statistically significant difference in feelings scores for the four groups [$F(3, 161)=8.93$, $p<.0005$]. The magnitude of difference in mean scores between the four groups was large, as indicated by the effect size (eta squared=.14). Tukey HSD post-hoc comparisons indicated that the mean score for Group 1 ($M=24.92$, $SD=16.32$) was significantly different from Group 2 ($M=33.79$, $SD=18.37$) and that the mean scores for Group 1, Group 2, and Group 3 ($M=29.80$, $SD=16.76$) were all significantly different from Group 4 ($M=45.50$, $SD=18.61$). Groups 1 and 3 and Groups 2 and 3 did not significantly differ from each other. Similar to reported attitudes, those participants who reported attending religious services most frequently

were significantly more likely to have negative feelings toward sexual minorities. Figure 6 shows the IHP means plot for the four groups.

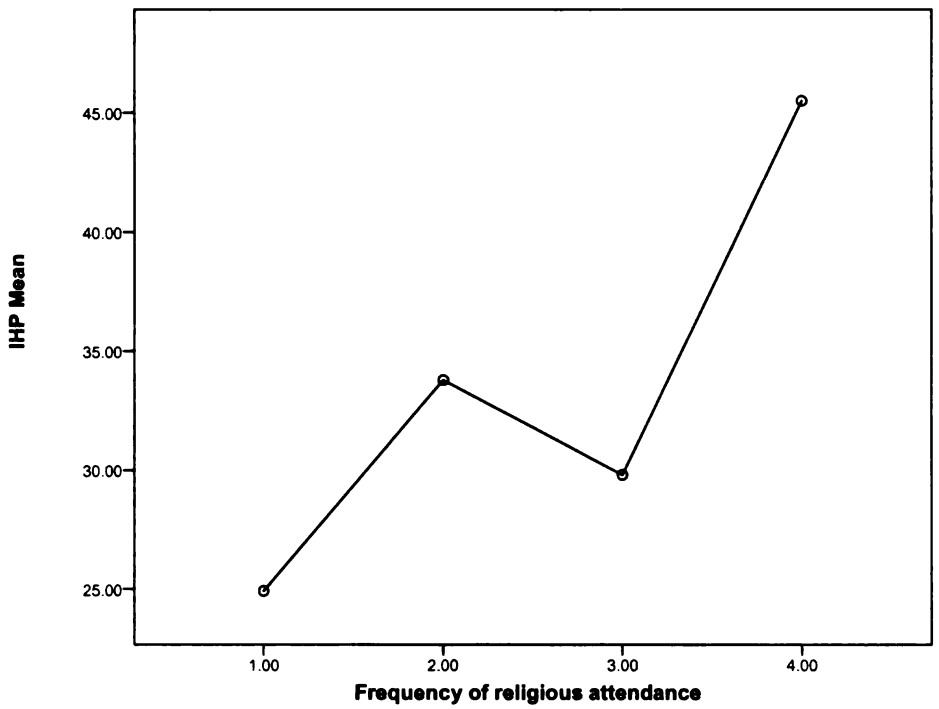

Figure 6. Plot of IHP means by frequency of religious attendance

The final ANOVA examined the impact of religious attendance on reported anticipated behaviors toward sexual minority students (ABFTS part 1) and on curriculum inclusion of diverse sexual orientations (ABFTS part 2). There was a statistically significant difference in behavior scores for the four groups [$F(3, 140)=4.38$, $p<.01$]. The magnitude of difference in mean scores between the four groups was moderate, as indicated by the effect size (eta squared=.09). Tukey HSD post-hoc comparisons indicated that the mean scores for Group 1 ($M=94.22$, $SD=6.42$) and for Group 2 ($M=94.07$, $SD=6.96$) were both significantly different from Group 4 ($M=88.04$,

SD=9.68). There were no other significant differences between groups. Figure 7 shows the ABFTS (part 1) means plot for the four groups.

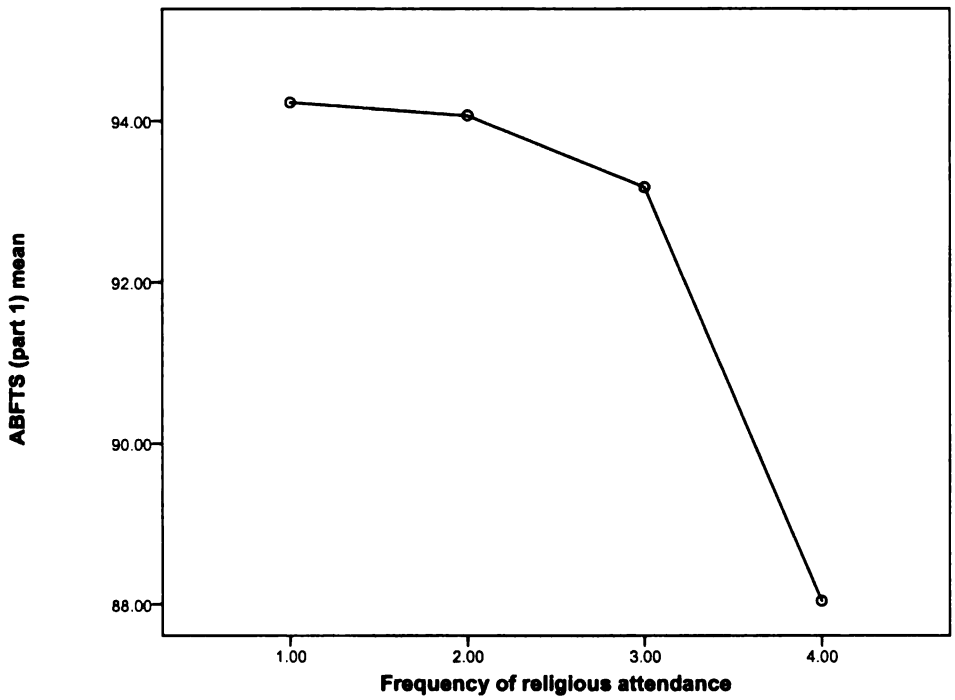

Figure 7. Plot of ABFTS (part 1) means by frequency of religious attendance

There was also a statistically significant difference in curriculum inclusion scores for the four groups [F(3, 157)=7.50, p<.0005]. The magnitude of difference in mean scores between the four groups was large, as indicated by the effect size (eta squared=.13). Tukey HSD post-hoc comparisons indicated that the mean scores for Group 1 (*M*=112.20, *SD*=9.95) and for Group 2 (*M*=108.69, *SD*=12.00) were both significantly different from Group 4 (*M*=99.59, *SD*=14.70). There were no other significant differences between groups, although the mean difference between Group 3 (*M*=108.35, *SD*=9.14) and Group 4 was approaching significance with p=.051. Figure 8

shows the ABFTS (part 2) means plot for the four groups. Overall participants frequently attending religious services were significantly more likely to report fewer positive anticipated behaviors toward sexual minority youth and less inclusion of topics of diversity in sexual orientation than those participants who reported infrequent or no attendance at religious services.

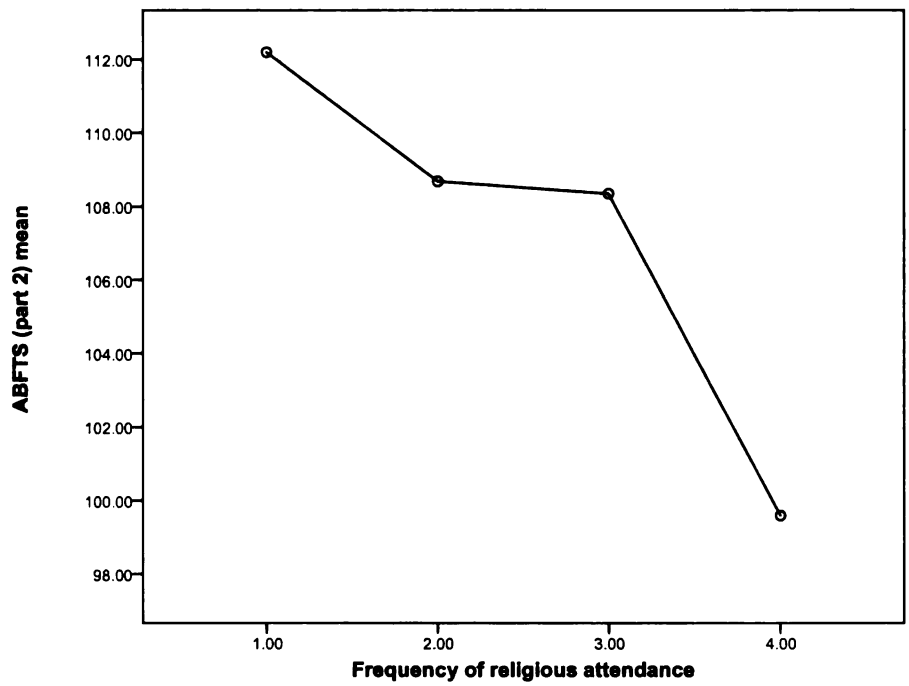

Figure 8. Plot of ABFTS (part 2) means by frequency of religious attendance

Impact of sex. A series of independent samples t-tests were conducted to compare attitudes, feelings, and anticipated behaviors and curriculum inclusion between male and female participants. There was a significant difference in reported attitudes of male (M=53.57, SD=25.64) and female participants [M=41.88, SD=23.88; t(158)=2.57, p=.01]. Females reported more positive attitudes toward people who identify as gay or lesbian

than males. However, despite the significance, the magnitude of the difference in the means was small (eta squared =.04).

There was also a difference in future teachers' anticipated behaviors toward sexual minority students (as measured by part 1 of the ABFTS). Male participants reported fewer positive behaviors toward sexual minority youth (M=89.53, SD=8.76) than female participants [M=92.62, SD=7.35; t(172)=-2.20, p=.03]. The magnitude of the difference in the means was small (eta squared =.03). There was no significant difference in reported feelings toward sexual minorities (as measured by the IHP) of males (M=35.17, SD=20.27) and females [M=30.86, SD=18.11; t(161)=1.23, p=.22] or in curriculum practices (as measured by part 2 of the ABFTS) of males (M=105.86, SD=11.64) and females [M=109.10, SD=12.21; t(157)=-1.43, p=.16].

Impact of certification level. One-way analysis of variance (ANOVA) was also used to determine the relationship between certification level being sought and attitudes (as measured by the ATLG-R), feelings (as measured by the IHP), and anticipated behaviors (as measured by the ABFTS part 1) and curriculum inclusion (ABFTS part 2). Participants were placed into one of five groups based on their reported level of certification being pursued (Group 1: early childhood; Group 2: elementary education; Group 3: secondary education; Group 4: K-12; Group 5: other). There were no statistically significant differences between certification groups for attitudes [F(3, 156)=.53, p=.66], feelings [F(4, 158)=.71, p=.59], anticipated behaviors [F(4, 138)=.42, p=.80], or curriculum inclusion [F(4, 154)=1.91, p=.11].

Impact of racial/ethnic identity. The final relationship examination planned for this study was between participant racial/ethnic identity and attitudes, feelings, and

anticipated behaviors toward sexual minority youth. However, due to a lack of sufficient sample diversity, these analyses could not be performed.

Chapter 5

Discussion

This study explored the attitudes, knowledge, and anticipated behaviors of an often-overlooked participant group, preservice teachers, who will have a significant impact on school climate and individual students in the future. Several outcomes were investigated including attitudes, feelings, and future behaviors toward gay, lesbian, and bisexual populations, including youth. Yang (1997) noted that most Americans believe homosexuality to be immoral and a threat to societal values. In addition, Sears's (1991) study found that eight out of ten prospective teachers reported negative feelings toward lesbians and gay men. However, such negative attitudes, feelings, and behaviors by teachers and peers do not only impact sexual minority students. Poteat and Espelage (2007) assessed the effects of homophobic victimization on indicators of psychological and social distress for all students, regardless of sexual orientation, over a one-year period. They found that homophobic victimization significantly predicted increased anxiety and depression, personal distress, and lower sense of school belonging in males and higher levels of withdrawal in females. In light of these findings, and given the amount of time that students spend interacting with teachers, who can play a vital role in halting such victimization, the ways that preservice teachers' attitudes and feelings may manifest in teacher behaviors (or lack of behaviors) are vital to examine.

Attitudes, Feelings, and Knowledge

Prospective teachers surveyed in this study reported moderately positive attitudes and low-grade non-homophobic feelings toward people who identify as gay, lesbian, and

bisexual. There was a lot of variance in reported attitudes, indicating that, despite the generally positive attitudes of the sample, individual attitudes varied widely. In fact, 22 (13%) participants held some degree of negative attitudes toward sexual minorities. There were no significant differences in attitudes toward the different sexual minority groups. Previous research (Sears, 1991) had shown that the majority of prospective teachers report negative attitudes and feelings toward lesbians and gay men in general. However, this was not the case in the current study, indicating that future teachers may have much more positive attitudes toward sexual minorities than they did 15 years ago. The findings from the current study are promising because the participants are part of the next generation of teachers who will be directly impacting the school climate for and experiences of sexual minority youth.

Upon closer examination of responses to attitude and feeling scales, it is clear that, although respondents generally report positive attitudes and feelings, they reported more discomfort (more negative feelings) about homosexuality when it was more personally relevant. For example, over half of the sample reported they would feel uncomfortable if a same-sex person was romantically interested in them or if they found themselves attracted to a member of the same-sex, one-third reported they would feel uncomfortable being seen in a gay establishment, and more than three-fourths of participants said they would feel uncomfortable if they found out a spouse or partner was attracted to members of the spouse's own sex. The negative responses when the questions involved more personal relevance indicate that, although the more global attitudes may appear positive and participants may feel they have positive attitudes, there is still a degree of discomfort when the issue is more immediately personal.

Preservice teachers in this study had limited information about sexual orientation. Most participants in this study correctly answered fewer than 60% of the factual questions about sexual orientation. For the majority of questions, respondents did not have incorrect information; instead, they lacked any information, as indicated by the high response rate for the 'Unsure' answer option. More than 20% of the future teachers surveyed responded that they were unsure of the correct answer to 14 of the 18 (78%) individual questions on the knowledge questionnaire. When comparing participants' knowledge about homosexuality, their attitudes about homosexuality, and their feelings toward lesbians and gay men, it was discovered that those teachers who demonstrated the least knowledge harbored the most negative attitudes and were the most homophobic. This relationship indicates the potential power of increasing knowledge among preservice teachers who, according to this study, have a lot of room for additional knowledge and growth.

Student Sexual Orientation and Anticipated Behaviors

Despite the reportedly positive attitudes and non-homophobic feelings toward sexual minorities, participants also still reported significantly different behaviors toward heterosexual and sexual minority students, as well as a reluctance to proactively include or discuss topics relating to sexual orientation in the classroom. However, participants also agreed or strongly agreed that they would treat each student (gay, lesbian, bisexual, and heterosexual) as they would treat any other student at their school. This belief clearly contradicts the actual reported behaviors. Future teachers reported that they would not talk to sexual minority or questioning students about issues or questions related to sexual identity, even if approached for support by such students. Instead, they would refer the

student to the guidance counselor or school psychologist. Even when a student simply shared basic information about his or her sexual orientation with the teacher, without mention of concerns, issues, or need for additional support, the teacher reported that he or she would refer the student to a school psychologist or to an outside mental health professional, which is not the case for a heterosexual student sharing information of a similar nature. Also, pre-service teachers reported that they would encourage a sexual minority student to interact with individuals of diverse sexual orientations, which is a potentially helpful activity for a student who identifies as GLB or is questioning his/her sexual orientation; however, teachers did not report that they would encourage heterosexual students to also get to know such diverse individuals. This difference in responses may reflect the idea that only those with minority sexual identities will benefit from interacting with people with diverse sexual orientations, rather than recognizing the benefit for all people, regardless of personal sexual identity. In this way, issues and knowledge of sexual orientation remain limited to those who identify as GLBQ instead of encouraging all people to interact with diverse individuals and to support all students. Past research (Sears, 1991) found that future teachers reported that they would behave differently toward a gay or lesbian student than toward a heterosexual student which, based on the findings of the current study, remains true today.

One question raised by these results is: is it desirable to treat sexual minority students differently from heterosexual students? Of course, the answer is not simple. In some cases, it may be appropriate to do so, depending on the student needs and circumstances; however, when the differences may negatively impact youth, such as by

refusing to be supportive of sexual minority students while affirming heterosexual students, such behavioral differences would not be appropriate.

Perhaps reflecting the political nature of public schools and the charged issue of sexual identity, many teachers reported an unwillingness to discuss, or even raise, age-appropriate topics related to sexual orientation in the classroom. However, they were significantly more willing to have discussions about race and ethnicity. At one time, educators were reluctant to include race and ethnicity as part of the curriculum; however, that does not appear to be the case any longer. Ideally, this would also be true of sexual orientation. According to the results of the current study, another generation of teachers will enter the classroom reluctant or unwilling to either formally include or informally discuss sexual identity.

Factors Affecting Attitudes, Feelings, and Behaviors

In this study, participants' frequency of attendance at religious services, sex, and friendship with a person who identifies as GLB was associated with attitudes, feelings, knowledge and anticipated future behaviors. Those participants who reported attending religious services most frequently also reported less knowledge and more negative attitudes, feelings, and behaviors toward sexual minorities. This finding should be interpreted with caution, as frequency of religious attendance does not necessarily indicate overall religiosity; rather, it is just one indicator of religiosity. However, given that this is an indicator, it is important to recognize the role of religion in an individual's knowledge, attitudes, feelings, and behaviors and to consider this when considering ways to improve knowledge and to change attitudes and behaviors. Male participants also reported more negative attitudes and fewer positive behaviors toward sexual minority

youth, although males were similar to females on reported curriculum inclusion. The effect size for the differences between men and women was small, perhaps as a function of the small number of male participants relative to female participants. These differences in attitudes, feelings, and anticipated behaviors indicate that some of the people who belong to the groups reporting more negative attitudes and fewer supportive behaviors may need additional or different types of interventions to increase knowledge and to encourage more positive attitudes and supportive behaviors toward future students.

This study also showed that friendship with a GLB-identified person impacted participants' attitudes, feelings, knowledge, and anticipated behaviors. Those future teachers who had at least one sexual minority friend had more positive attitudes and feelings, more knowledge, more positive behaviors toward sexual minority students, and greater willingness to openly discuss topics of sexual orientation as part of the classroom curriculum. Interestingly, a much larger effect size was found between having a friend who is GLB-identified and feelings toward sexual minorities than between friendship and the other outcome variables. It may be concluded that, for this sample of pre-service teachers, having a significant relationship with a person who identifies as a sexual minority significantly impacts the more personal, affective responses toward sexual minorities. In this way, getting to know people of diverse sexual orientations could be another way to improve individuals' familiarity with and feelings toward all sexual minorities. While ideally it would be desirable to have all people be friends with individuals who openly identify as GLB, this situation is dependent upon many uncontrollable and personal factors, such as the individuals' personalities, ability to be open about sexual identity, degree of openness about identity, and compatibility of

individuals in order to create a friendship. Instead, promoting familiarity and friendships with sexual minority individuals may begin by targeting factors that are more open to change through less personal methods, such as improving knowledge about homosexuality. This may lead people to more positive attitudes and more understanding of all people, opening the door for friendly relationships with more diverse people.

Limitations

As with all research, this study had a number of limitations that will impact the generalizability of the findings to wider populations of future educators. Additional research is needed to gain more information about the attitudes, feelings, knowledge, and future behaviors of both currently practicing and future teacher teachers.

Restricted Sample. The first limitation is the restricted sample. This study targeted pre-service teachers at one teacher education institution in one part of the country. Therefore, the reported results may not represent the views and anticipated behaviors of other future teachers across the country. Also, because the study targeted future teachers, the participant age range was fairly restricted. However, this limited age range may be representative of the characteristics of future educators. Additional research is necessary to determine the degree of representativeness. The study sample also had insufficient racial and ethnic diversity, to the degree that separate analyses and comparisons of attitudes, feelings, knowledge, and anticipated behaviors were not possible. Thus, all respondents were grouped together despite possible differences in these characteristics. Future research should examine these groups independently to see if any differences exist in any of the knowledge or outcome variables. Such analyses could potentially increase the generalizability of the findings to other demographic groups.

Self-report measures. Another limitation of this study is that it relies solely on self-report measures. With self-report measures, answers to personally sensitive questions are likely to be influenced by social desirability, known as social desirability bias (Spector, 1994). People may report their own attitudes and behaviors in a manner they feel they "should" or that will make them "look good". This may be especially true in this study given the charged nature of discussions about sexual identity.

However, participant self-report methods should not be completely discounted. Self-report measures generally reflect participants' affective reactions and feelings about the topic(s) under investigation (Spector, 1994), which are the target variables in the study. These methods explore participants' perceptions of such things as their attitudes, feelings, and anticipated future behaviors toward sexual minority students. While the use of self-report is a limitation, it is also important to recognize that this research area (i.e., current and future teachers' attitudes, feelings, and behaviors toward sexual minority students) is still in an early stage of development. Also, some of the variables (i.e. attitudes and feelings) do not lend themselves to being evaluated through observational or other methods. Additional research is needed to explore how accurately self-ratings via survey methods capture individuals' attitudes and feelings. In addition, investigations of how well attitudes and feelings link to actual behavior are also necessary.

New Scale Introduction. A final limitation of this study is the use of a newly-developed measure to examine future teachers' anticipated behaviors toward sexual minority students and willingness to include diversity topics in classroom curriculum (ABFTS). Since this is the first time the scale has been used in any formal research, additional analyses of its reliability and validity are warranted. This measure was

included for all participants, regardless of the level of school they plan to teach, leaving room for respondents to interpret the vignettes in different ways.

Implications for Practice and Future Research

According to the National Association of School Psychologists (2004), school psychologists are obligated to ensure that all students have an equal opportunity for personal identity development in an environment free from discrimination, harassment, violence, and abuse. Other professionals within schools, particularly teachers, are also in a prime position to affect the environment in ways that promote tolerance and acceptance. According to Coleman (1988) supportive teachers and non-family adult role models are important for healthy adolescent development. Thus, school psychologists can use the results of this study to better understand new teachers' attitudes and feelings toward and understanding of sexual minority youth. This information can be a starting point for promoting collaboration and information sharing between school psychologists and educators of all experience levels that focuses on promoting positive school climate and outcomes for all students.

School psychologists have the advantage of working with numerous stakeholders, including parents, teachers/staff, and community agencies and programs. For example, school psychologists are trained to serve as interventionists and consultants at all levels. In addition to providing individual services to sexual minority or questioning students, they may also provide consultation and training on building- and district-wide levels. Using these consultation skills, school psychologists can work with other school professionals to increase knowledge and understanding of the nature of sexual identity, the needs of sexual minority youth, and the role and impact of homophobic victimization

on creating an unwelcoming climate for all students. The current study shows the need for providing basic information about sexual minorities and the impact such knowledge may have on improving attitudes and creating more affirming classroom environments for all students. Consultation may take the form of a professional development session, library of resources such as books, articles, and videos, or school-based consultation team for teachers to contact with questions or concerns related to issues of sexual orientation. Based on the results of the present study, increasing the knowledge base and personal understanding of new teachers, and potentially of current teachers, related to sexual orientation and identity development may be an initial step toward more positive attitudes, feelings, and behaviors and more inclusive curriculum. Professional development workshops provide a safe arena for educators to ask questions and discuss concerns related to working with sexual minority students, to intervening when witnessing victimization, and to including topics of sexual orientation and identity in developmentally-appropriate forms in the classroom.

Finally, future research should examine the current attitudes, feelings, and behaviors of larger, more diverse populations, as well as other groups, such as currently practicing teachers with a range of experiences. This study may be used as a starting point for conceptualizing ways to integrate training seminars or modules into teacher education program curricula and to evaluate their impact. By further examining and considering the factors that impact the attitudes, feelings, knowledge, and behaviors of future teachers, and the link between attitudes and behaviors, it will be possible to design and implement intervention programs to increase knowledge and improve attitudes. Such

programs will help to make teachers more prepared to serve, support, and, hopefully, affirm all students, before they even enter the classroom.

Appendix A

Future Teachers' Opinions and Knowledge Survey
Participant Consent

1. The researcher in this study is interested in your opinions and knowledge. You will be asked to complete five surveys about your attitudes, beliefs, feelings, and knowledge about sexual minority (i.e. gay male, lesbian, bisexual) persons, including students, as well as to provide some information about yourself.

2. Participants will complete the five surveys and provide demographic information. The entire process will take approximately 20-30 minutes.

3. Confidentiality is assured to you on the part of the researcher. Once your responses are received, the data will be treated and stored as anonymous responses. Computer IP addresses will not be tracked by the researcher.

4. After completing all the surveys, you will be asked to voluntarily enter your email address in order to receive a $5 Amazon.com gift certificate for your participation. You will also be entered into a random drawing for one of four larger Amazon.com gift cards ($25 each), as appreciation of your participation. Your email address will not be linked to your specific survey responses. Email addresses will be kept in a separate database and will be deleted as soon as the drawing is complete.

5. Your privacy will be protected to the maximum extent allowable by law.

6. Participation is voluntary; you may choose not to participate at all, or you may refuse to participate in certain procedures or answer certain questions or discontinue your participation at any time without penalty. In order to receive a $5 gift certificate, you must participate in the study.

7. Participation in studies like this one will provide researchers with results that can be used to help understand the attitudes of future teachers and to potentially create or improve training opportunities for working with sexual minority youth .

8. When you are done reading this page, you will be asked to consent to participate. If you choose to participate, you will be asked to complete five surveys regarding your attitudes, beliefs, feelings, and knowledge about sexual minority persons, including students. After you complete these surveys, you will answer some questions about yourself such as your race/ethnicity, age, certification area, sex, and experiences with coursework.

9. Investigators will not attempt to link your opinions back to your name or other identifying information.

10. By continuing after this page, you agree to participate in the study and have data collected from your responses included in the study's results.

11. If you have any questions regarding the study, please contact the researcher (Amanda Hirsch) by phone: (517) 432-0843, email: hirscham@msu.edu, or USPS mail: 401E Erickson Hall, East Lansing, MI 48824. You may also contact Dr. John Carlson, Dissertation Chair, by phone: 517-432-4856, email: carlsoj@msu.edu, or mail: 431 Erickson Hall, East Lansing, MI 48824.

    If you have questions or concerns about your rights as a research participant, please feel free to contact Peter Vasilenko, Ph.D., Director of the Human Subject Protection Programs at Michigan State University: (517) 355-2180, fax: (517) 432-4503, email: irb@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Appendix B

Attitudes Toward Lesbians and Gay Men Scale – Revised (ATLG-R)

1. **Gay male couples should be allowed to adopt children the same as heterosexual couples.***

   Strongly Disagree — Strongly Agree

   1 2 3 4 5 6 7

2. **I think gay men are disgusting.**

   Strongly Disagree — Strongly Agree

   1 2 3 4 5 6 7

3. **Gay men should <u>not</u> be allowed to teach school.**

   Strongly Disagree — Strongly Agree

   1 2 3 4 5 6 7

4. **Male homosexuality is a perversion.**

   Strongly Disagree — Strongly Agree

   1 2 3 4 5 6 7

5. **Male homosexuality is a natural expression of sexuality in men.***

   Strongly Disagree — Strongly Agree

   1 2 3 4 5 6 7

6. **If a man has homosexual feelings, he should do everything he can to overcome them.**

   Strongly Disagree — Strongly Agree

   1 2 3 4 5 6 7

7. **I would <u>not</u> be too upset if I learned that my son were a homosexual.***

   Strongly Disagree — Strongly Agree

   1 2 3 4 5 6 7

8. **Sex between two men is just plain wrong.**

   Strongly Disagree — Strongly Agree

   1 2 3 4 5 6 7

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

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

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

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

11. Lesbian couples should be allowed to adopt children the same as heterosexual couples.*

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

12. I think lesbians are disgusting.

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

13. Lesbians should <u>not</u> be allowed to teach school.

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

14. Female homosexuality is a perversion.

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

15. Female homosexuality is a natural expression of sexuality in women.*

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

16. If a woman has homosexual feelings, she should do everything she can to overcome them.

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

17. I would <u>not</u> be too upset if I learned that my daughter were a homosexual.*

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

18. Sex between two women is just plain wrong.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

19. The idea of female homosexual marriages seems ridiculous to me.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

20. Female homosexuality is merely a different kind of lifestyle that should not be condemned.*

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

* indicates reverse score

Appendix C

Attitudes Regarding Bisexuality Scale (ARBS)

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

1----------2----------3----------4----------5
Strongly Disagree **Strongly Agree**

____ 1. Most men who claim to be bisexual are in denial about their true sexual orientation.
____ 2. Male bisexuality is harmful to society because it breaks down the natural divisions between the sexes.
____ 3. Gay men are less confused about their sexuality than bisexual men.
____ 4. Bisexuality in men is immoral.
____ 5. Just like homosexuality and heterosexuality, bisexuality is a stable sexual orientation for men.
____ 6. Bisexual men are sick.
____ 7. Most men who identify as bisexual have *not* yet discovered their true sexual orientation. .
____ 8. Male bisexuality is *not* a perversion.
____ 9. Most men who call themselves bisexual are temporarily experimenting with their sexuality.
____ 10. As far as I'm concerned, male bisexuality is unnatural.
____ 11. Male bisexuals are afraid to commit to one lifestyle.
____ 12. The growing acceptance of male bisexuality indicates a decline in American values.

____ 13. Most women who identify as bisexual have *not* yet discovered their true sexual orientation.
____ 14. Female bisexuality is *not* a perversion.
____ 15. Most women who call themselves bisexual are temporarily experimenting with their sexuality.
____ 16. As far as I'm concerned, female bisexuality is unnatural.
____ 17. Female bisexuals are afraid to commit to one lifestyle.
____ 18. The growing acceptance of female bisexuality indicates a decline in American values.
____ 19. Most women who claim to be bisexual are in denial about their true sexual orientation.
____ 20. Female bisexuality is harmful to society because it breaks down the natural divisions between the sexes.
____ 21. Lesbians are less confused about their sexuality than bisexual women.
____ 22. Bisexuality in women is immoral.

____ 23. Just like homosexuality and heterosexuality, bisexuality is a stable sexual orientation for women.
____ 24. Bisexual women are sick.

Appendix D

Index of Homophobia (IHP)

1. **I would feel comfortable working closely with a male homosexual.**

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

2. **I would enjoy attending social functions at which homosexuals were present.**

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

3. **I would feel uncomfortable if I learned that my neighbor was homosexual.***

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

4. **If a member of my sex made a sexual advance toward me, I would feel angry.***

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

5. **I would feel comfortable knowing that I was attractive to members of my sex.**

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

6. **I would feel uncomfortable being seen in a gay establishment, such as a restaurant or bar.***

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

7. **I would feel comfortable if a member of my sex made an advance toward me.**

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

8. **I would be comfortable if I found myself attracted to a member of my sex.**

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

9. **I would feel disappointed if I learned that my child was homosexual.***

   Strongly Disagree Neither agree nor disagree Strongly Agree

   1 2 3 4 5

10. I would feel nervous being in a group of homosexuals.*

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

11. I would feel comfortable knowing that my clergyman was homosexual.

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

12. I would be upset if I learned that my brother or sister was homosexual.*

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

13. I would feel that I had failed as a parent if I learned that my child was gay.*

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

14. If I saw two men holding hands in public, I would feel disgusted.*

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

15. If a member of my sex made an advance toward me, I would be offended.*

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

16. I would feel comfortable if I learned that my daughter's teacher was a lesbian.

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

17. I would feel uncomfortable if I learned that my spouse or partner was attracted to members of his or her sex.*

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

18. I would feel at ease talking with a homosexual person at a party.

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

19. I would feel uncomfortable if I learned that my boss was homosexual.*

Strongly Disagree Neither agree nor disagree Strongly Agree

1 2 3 4 5

20. It would not bother me to walk through a predominantly gay section of town.

Strongly Disagree		Neither agree nor disagree		Strongly Agree
1	2	3	4	5

21. It would disturb me to find out that my doctor was homosexual.*

Strongly Disagree		Neither agree nor disagree		Strongly Agree
1	2	3	4	5

22. I would feel comfortable if I learned that my best friend of my sex was homosexual.

Strongly Disagree		Neither agree nor disagree		Strongly Agree
1	2	3	4	5

23. If a member of my sex made an advance toward me, I would feel flattered.

Strongly Disagree		Neither agree nor disagree		Strongly Agree
1	2	3	4	5

24. I would feel uncomfortable knowing that my son's male teacher was homosexual.*

Strongly Disagree		Neither agree nor disagree		Strongly Agree
1	2	3	4	5

25. I would feel comfortable working closely with a female homosexual.

Strongly Disagree		Neither agree nor disagree		Strongly Agree
1	2	3	4	5

* indicates reverse score

Appendix E

Vignettes

As a future service provider of children's needs, you will come into contact with diverse individuals of all ages. Please read the following vignette and respond honestly to the questions that follow.

Heterosexual student (sex unspecified):
A 16-year-old student has recently told you he/she is dating a person of the opposite sex.

Gay male student:
A 16-year-old male student has recently told you he is gay

Lesbian female student:
A 16-year-old female student has recently told you she is a lesbian.

Bisexual (sex unspecified) student:
A 16-year-old student has recently told you he/she is bisexual.

Appendix F

Anticipated Behaviors of Future Teachers Toward Sexual Minority Youth (ABFTS)

1----------2----------3----------4----------5
Very Unlikely **Very Likely**

Part 1: Please indicate how likely you would be to do the following things as a teacher, based on the student information presented above.

____ 1. I would show this student the same respect I show other students.

____ 2. I would refer this student to the counselor or school psychologist to talk about the situation.

____ 3. I would correct and discipline teasing directed toward this student.

____ 4. I would talk with this student about his/her sexual orientation.

____ 5. I would tell other teachers of my information about this student.*

____ 6. I would notify the student's parents/guardians about his/her revelation.*

____ 7. I would refer this student for psychological testing.*

____ 8. I would keep this student from physically interacting too closely with peers.*

____ 9. I would encourage other students to be friends with this student.

____ 10. I would tell this student that his/her behavior is a sin.*

____ 11. I would treat this student as I would treat any other child at my school.

____ 12. I would encourage this student to work to overcome his/her problem.*

____ 13. I would encourage the student to choose another way of life.*

____ 14. I would reassure this student that this is a phase that will be outgrown.*

____ 15. I would encourage this student to interact with individuals of diverse sexual orientations.

____ 16. I would help the student find information about sexual orientation if he/she wished to do so.

____ 17. I would get information about referring this student to a mental health care worker who could help the student to change his/her sexual orientation.*

____ 18. I would encourage this student to speak with a religious figure (e.g. priest, rabbi, imam, etc.).*

____ 19. I would encourage this student to join a club or group for youth in similar situations.

____ 20. I would reassure the student that his/her sexual orientation is normal.

____ 21. I would not discuss the situation with the student, beyond what he/she has told me.*

____ 22. I would get information about referring this student to a mental health care worker who could talk to the student about his/her situation.

____ 23. I would let the student know that his/her sexual orientation may change once he/she gets older.*

Part 2: Please indicate how likely you would be to do the following things as a teacher, using the above numbered scale.

____ 1. I would discuss homosexuality in a positive way if the subject came up in my classroom.

____ 2. I would teach students that homosexuality is immoral.*

____ 3. I would encourage students to treat gay, lesbian, and bisexual peers as they would treat any other peer.

____ 4. I would encourage students to help classmates overcome their homosexuality.*

____ 5. If I knew I had a gay, lesbian, or bisexual student in my class, I would be sure to include this topic in my curriculum.

____ 6. If the subject came up, I would teach students that gay, lesbian, and bisexual orientations were unnatural.*

____ 7. I would teach students that having a gay, lesbian, or bisexual orientation is a sin.*

____ 8. I would teach students that gay, lesbian, and bisexual orientations can be changed, with help and support.*

____ 9. If my students were engaging in name-calling, I would implement plans for managing name-calling, including homophobic names.

____ 10. I would not discuss homosexuality in the classroom, regardless of the circumstances.*

____ 11. If a student approached me about sexual orientation concerns, I would ensure the student received positive information and support about different sexual orientations (e.g. lesbian, gay, bisexual), if he/she wanted it.

____ 12. I would initiate discussions of homosexuality in the classroom, even if I did not knowingly have any gay, lesbian, or bisexual students.

____ 13. I would stop a same-sex attracted student from showing physical affection to a same-sex peer.*

____ 14. I would discipline a student for verbally or physically harassing another student about his/her race or ethnic identity.

____ 15. I would be sure that my students understood the dangers of non-heterosexual sexual orientations.*

____ 16. I would refer a student to the counselor or school psychologist if she/he had questions about sexual orientation.*

____ 17. Even if I had sufficient training, I would still be reluctant to talk about homosexuality in the classroom.*

____ 18. I would discipline a student for verbally or physically harassing another student about his/her actual or perceived sexual orientation.

____ 19. Assuming I felt knowledgeable, I would respond positively to a student's questions about sexual orientation.

____ 20. I would initiate discussions of race in the classroom, even if I did not have any students of color.

____ 21. I would teach students that being gay, lesbian, or bisexual is as normal as being heterosexual.

____ 22. I would modify my curriculum for diversity by including sexual orientation.

____ 23. I would encourage all students to get to know people of diverse sexual orientations, such as gay, lesbian, or bisexual people.

____ 24. I would stop a male and female student from showing physical affection to each other.*

____ 25. I would teach students the value of diversity in sexual orientation.

____ 26. I would ask a more knowledgeable person (e.g. school counselor, school psychologist) for information about supporting gay, lesbian, and bisexual students.

____ 27. If I overheard students using negative terms in a conversation (e.g. fag, dyke, homo), I would intervene immediately to stop the use of the terms.

* indicates reverse score

Appendix G

Knowledge About Homosexuality Questionnaire

Please respond to each of the following statements by circling 'True' if you think that it is true and 'False' if you think that it is false. If you do not know the answer, select 'Don't Know'.

1. **Homosexuality is a phase which children outgrow.**

   A. True **B. False** C. Don't Know

2. **There is a good chance of changing homosexual persons into heterosexual men and women.**

   A. True **B. False** C. Don't Know

3. **Most homosexuals want to be members of the opposite sex.**

   A. True **B. False** C. Don't Know

4. **Some church denominations have condemned legal and social discrimination against homosexuals.**

   A. True B. False C. Don't Know

5. **Sexual orientation is established at an early age.**

   A. True B. False C. Don't Know

6. **According to the American Psychological Association, homosexuality is an illness.**

   A. True **B. False** C. Don't Know

7. **Homosexual males are more likely to seduce young boys than heterosexual males are to seduce young girls.**

   A. True **B. False** C. Don't Know

8. **Gay men are more likely to be victims of violent crime than the general public.**

   A. True B. False C. Don't Know

9. **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

10. **A person becomes homosexual (develops a homosexual orientation) because he/she chooses to do so.**

    A. True **B. False** C. Don't Know

11. Homosexual activity occurs in many animals

A. True B. False C. Don't Know

12. 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

13. A homosexual person's gender identity does not agree with his/her biological sex.

A. True **B. False** C. Don't Know

14. 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

15. Heterosexual men tend to express more hostile attitudes toward homosexuals than do heterosexual women.

A. True B. False C. Don't Know

16. "Coming out" is a term that homosexuals use for publicly acknowledging their homosexuality.

A. True B. False C. Don't Know

17. Bisexuality can be characterized as sexual behaviors and/or responses to both males and females.

A. True B. False C. Don't Know

18. Recent research has shown that homosexuality may be linked to chromosomal differences

A. True B. False C. Don't Know

Appendix H

Participant Information

Age: _____

Sex: **Male** **Female** **Trans**

Ethnicity:

_____ **01 African American/Black**
_____ **02 Asian/Asian American/Pacific Islander**
_____ **03 Caucasian/European American/White; not Hispanic**
_____ **04 Latino/a; Hispanic; Puerto Rican**
_____ **05 Native American/American Indian/Alaskan Native**
_____ **06 Other (please specify):**_____

Relationship Status: **(check one)**

_____ **01 Single/Never Married**
_____ **02 Married**
_____ **03 Divorced**
_____ **04 Widowed**
_____ **05 Committed Relationship/Significant Other**

Certification Level Sought: **(check one)**

_____ **01 Early Childhood**
_____ **02 Elementary Education**
_____ **03 Secondary Education**
_____ **04 K-12**
_____ **05 Other:**_____

Teaching Area:

_____ **01 General Education (e.g. math, science, elementary, social studies, history, English, etc.)**
_____ **02 Special Education (e.g. LD, CI, EI, BD, etc.)**
_____ **03 Physical Education (e.g. coach, P.E., etc.)**
_____ **04 Vocational Education (e.g. Agricultural Ed., Technical Training, etc.)**
_____ **05 Administration (e.g. principal, superintendent, etc.)**
_____ **06 Support Personnel (e.g. counselor, psychologist, speech pathology, etc.)**

Classification:

_____ **01 Freshman** _____ **02 Sophomore**
_____ **03 Junior** _____ **04 Senior**
_____ **05 Fifth Year Intern** _____ **06 Graduate Student**
_____ **07 Lifelong Ed** _____ **08 Other:**_____

Sexual Orientation:

Select the number that best represents your sexual, physical, and emotional attractions, fantasies, preferences, and behaviors. Are they for...

Other sex only	Other sex mostly	Other sex somewhat more	Both sexes equally	Same sex somewhat more	Same sex mostly	Same sex only
1	2	3	4	5	6	7

Please write number here: _____

Identity: (please choose the one category that best represents how you identify your sexual orientation)

_____ 01 Bisexual
_____ 02 Gay/Lesbian
_____ 03 Heterosexual
_____ 04 Unsure/Questioning
_____ 05 Other (please specify): _____

Religious Attendance:

About how often do you attend religious services/activities (i.e. church, synagogue, etc.)?

1_____Never
2_____Once a month
3_____Several times a month
4_____Once a week or more than once a week

I am friends with someone who is "gay male", "lesbian", or "bisexual".

1_____Yes
1a. If yes, number of friends who identify as gay, lesbian, or bisexual: _____

2_____No

I have a family member who is "gay male", "lesbian", or "bisexual".

1_____Yes
1a. If yes, number of family members who identify as gay, lesbian, or bisexual: __

2_____No

I have had a college course dealing exclusively with diversity and multicultural issues, including sexual orientation.

1_____Yes

1a. If yes, what course have you taken (please specify): _____

2_____No

I believe that having an understanding of homosexuality is important in my professional development since I may be working directly with people who are homosexual.

1_____Yes
2_____No

State (if U.S.) or Country of Legal Residence: _____

Name of University currently attending: _____

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