



Winter 12-2012

# TEACHERS' EXPLICIT AND IMPLICIT ATTITUDE TOWARD HOMOSEXUALITY: THE ROLE OF INTERNAL AND EXTERNAL MOTIVATION TO RESPOND WITHOUT PREJUDICE

Christina C. Graham  
creechec@yahoo.com

Follow this and additional works at: [http://repository.upenn.edu/edissertations\\_sp2](http://repository.upenn.edu/edissertations_sp2)

 Part of the [Other Teacher Education and Professional Development Commons](#), [Secondary Education and Teaching Commons](#), [Social and Philosophical Foundations of Education Commons](#), [Social Work Commons](#), and the [Student Counseling and Personnel Services Commons](#)

---

## Recommended Citation

Graham, Christina C., "TEACHERS' EXPLICIT AND IMPLICIT ATTITUDE TOWARD HOMOSEXUALITY: THE ROLE OF INTERNAL AND EXTERNAL MOTIVATION TO RESPOND WITHOUT PREJUDICE" (2012). *Doctorate in Social Work (DSW) Dissertations*. Paper 29.

---

# TEACHERS' EXPLICIT AND IMPLICIT ATTITUDE TOWARD HOMOSEXUALITY: THE ROLE OF INTERNAL AND EXTERNAL MOTIVATION TO RESPOND WITHOUT PREJUDICE

**Abstract**

Research has shown that lesbian, gay, and bisexual youth have increased rates of physical and mental health problems primarily due to the chronic stress incurred by the levels of prejudice and isolation experienced in their environment, especially in Southern States. Teachers are the most available and sought after adults by sexual minority students, helping them to mitigate such toxic environments. In this study, the aim was to examine the relationship between implicit and explicit attitudes of homonegativity and the moderating role of motivation to control prejudiced reactions among teachers in Southern states. Additional information was gathered about the teachers' school environment in regard to protective factors that were or were not in place for sexual minority students and possible resources that they perceived would be helpful in establishing a more positive environment for these students. Correlations were found between the Implicit Association Test (IAT), Modern Homonegativity Scale (MHS), and the Internal (IMS) and External (EMS) Motivation to Respond without Prejudice measure among other variables. Further, information was obtained that verified that the majority of these schools lacked needed protective factors to help sexual minority students navigate their environment safely.

**Degree Type**

Dissertation

**Degree Name**

Doctor of Social Work (DSW)

**Department**

Counseling and Human Services

**First Advisor**

Ram Cnaan, Ph.D., MSW

**Second Advisor**

Lina Hartocollis, Ph.D.

**Third Advisor**

Andrea Doyle, Ph.D.

**Keywords**

South Carolina, gay, lesbian, bisexual, sexual minorities, youth

---

**Subject Categories**

Other Teacher Education and Professional Development | Secondary Education and Teaching | Social and Philosophical Foundations of Education | Social Work | Student Counseling and Personnel Services

TEACHERS' EXPLICIT AND IMPLICIT ATTITUDE TOWARD  
HOMOSEXUALITY: THE ROLE OF INTERNAL AND EXTERNAL MOTIVATION  
TO RESPOND WITHOUT PREJUDICE

Chris Graham, LCSW

A DISSERTATION

in

Social Work

Presented to the Faculties of the University of Pennsylvania In  
Partial Fulfillment of the Requirements for the Degree of Doctor of Social Work

2012

---

Ram A. Cnaan, Ph.D., MSW  
Professor and Director, Program for Religion and Social Policy Research  
School of Social Policy & Practice  
Supervisor of Dissertation

---

Richard J. Gelles, Ph.D.  
Dean, School of Social Policy and Practice

Dissertation Committee  
Lina Hartocollis, Ph.D.  
Andrea Doyle, Ph.D.



## ACKNOWLEDGEMENT

I want to begin by thanking University of Pennsylvania, School of Social Policy and Practice, for accepting me into their Doctorate in Social Work Program. Without their leap of faith, my capacity to accomplish what I would like to achieve in life would have been greatly limited. A special thanks needs to be given to my chair, Dr. Ram Cnaan, who willingly accepted me under his tutelage and offered me the guidance, support and encouragement that were needed for me to follow through with my research and this program. I want thank Dr. Lina Hartocollis and Dr. Andrea Doyle for being willing to accept a place on my committee, which required additional time and energy on their part, in their already busy schedules. You all played an integral part in my success in this program.

I want to share my appreciation to all my family, friends and my wonderful DSW cohort of 2009 for the phone calls and messages of encouragement sent to me throughout the years of this program, which helped me keep my focus on the end result. I want to highlight my mother's influence in this endeavor, for if she had not strived for her masters and doctorate later on in life, the thought of continuing my education past by bachelor's degree may have never occurred to me. Her presence throughout my life and daily phone calls since beginning this program has helped me to stay sane and grounded. I want to thank my mom for being my best friend and for continuing to love, encourage and support me and my family in all we do. She truly understands the role of a mother in that the job does not end when I turn 18, but only evolves as the decades pass.

I want to share my utmost gratitude to my wife, Suzan, for without her influence this dream of pursuing a degree at an Ivy League college in a completely different state would not have been dreamt or pursued. I, having never lived outside of South Carolina, and she, growing up traveling the world, eventually forced me, through the thousands of conversations we had throughout the years, to question my limited understanding of life and what it had to offer. I consider myself very blessed and thankful that of all the places her father could have retired from the military, it ended up being in my little hometown of Anderson, SC. Her calming energy, confidence, and encouragement have been integral in creating the person I am today. My wife's commitment to me and her many sacrifices she has endured to help me get to where I am are by far the leading reason for this dream to have come to fruition.

TEACHERS' EXPLICIT AND IMPLICIT ATTITUDE TOWARD  
HOMOSEXUALITY: THE ROLE OF INTERNAL AND EXTERNAL MOTIVATION  
TO RESPOND WITHOUT PREJUDICE

Chris Graham, LCSW

Ram Cnaan, Ph.D., MSW

ABSTRACT

Research has shown that lesbian, gay, and bisexual youth have increased rates of physical and mental health problems primarily due to the chronic stress incurred by the levels of prejudice and isolation experienced in their environment, especially in Southern States. Teachers are the most available and sought after adults by sexual minority students, helping them to mitigate such toxic environments. In this study, the aim was to examine the relationship between implicit and explicit attitudes of homonegativity and the moderating role of motivation to control prejudiced reactions among teachers in Southern states. Additional information was gathered about the teachers' school environment in regard to protective factors that were or were not in place for sexual minority students and possible resources that they perceived would be helpful in establishing a more positive environment for these students. Correlations were found between the Implicit Association Test (IAT), Modern Homonegativity Scale (MHS), and the Internal (IMS) and External (EMS) Motivation to Respond without Prejudice measure among other variables. Further, information was obtained that verified that the majority of these schools lacked needed protective factors to help sexual minority students navigate their environment safely.

## TABLE OF CONTENTS

COPYRIGHT.....	II
ACKNOWLEDGEMENT .....	III
ABSTRACT.....	IV
TABLE OF CONTENTS.....	V
LIST OF FIGURES .....	IX
LIST OF TABLES.....	XI
CHAPTER ONE.....	1
BACKGROUND OF THE STUDY .....	1
<i>The Misunderstood Sexual Orientation</i> .....	1
<i>Sexual Minorities' Mental and Physical Health Problems</i> .....	2
THEORETICAL FRAMEWORK .....	9
<i>Minority Stress Theory</i> .....	9
<i>General Psychological Mediating Process</i> .....	10
<i>Perceived Discrimination-Health Theory</i> .....	16
STATEMENT OF THE PROBLEM .....	18
SIGNIFICANCE OF THE STUDY .....	19
CHAPTER 2: LITERATURE REVIEW .....	20
VARIABLES THAT IMPACT DISCRIMINATION .....	20
RESILIENCE .....	20
TEACHER'S IMPACT ON STUDENTS .....	22
EXPLICIT AND IMPLICIT ATTITUDE .....	25
PREDICTABILITY OF PREJUDICIAL BEHAVIOR .....	27

PREJUDICE-REDUCTION EFFORTS .....	28
THE SOUTHERN IMPACT AND LACK OF EXTERNAL MOTIVATION.....	30
DEMOGRAPHIC, ATTITUDINAL, PERSONALITY CORRELATES .....	33
IMPLICIT ASSOCIATION SCALE AND EXPLICIT ATTITUDE SCALES RELATED TO HOMOSEXUALITY .....	35
CHAPTER 3: METHODOLOGY .....	44
INTRODUCTION .....	44
RESEARCH QUESTIONS AND HYPOTHESES .....	44
RESEARCH VARIABLES .....	47
<i>Dependent Variables</i> .....	47
<i>Independent Variables</i> .....	48
LOGIC MODEL.....	49
SAMPLE.....	49
INSTRUMENTATION .....	50
<i>Modern Homonegativity Scale</i> .....	50
<i>Implicit Association Test</i> .....	55
<i>Internal and External Motivation to Respond without Prejudice</i> .....	58
PROCEDURE .....	61
RESPONSE RATE.....	63
STATISTICAL ANALYSIS .....	66
CHAPTER 4 .....	68
RESULTS .....	68
<i>Demographic Information</i> .....	68

<i>Hypothesis One</i> .....	75
<i>Hypothesis Two</i> .....	76
<i>Hypothesis Three</i> .....	78
<i>Hypothesis Four</i> .....	84
<i>Additional Data from the Study</i> .....	96
CHAPTER FIVE .....	104
DISCUSSION .....	104
<i>Implicit Association Test</i> .....	105
<i>Modern Homonegativity Scale – Lesbian</i> .....	105
<i>Modern Homonegativity Scale – Gay</i> .....	107
<i>External Motivation to Respond without Prejudice</i> .....	110
<i>Internal Motivation to Respond without Prejudice</i> .....	111
<i>Independent Variables</i> .....	113
LIMITATIONS AND FUTURE RESEARCH .....	113
CONCLUSIONS .....	116
REFERENCES .....	123
APPENDICES .....	160
APPENDIX A	
CHART OF STUDENT’S EXPERIENCE WITH BULLYING NATIONALLY AND IN DIFFERENT STATES .....	160
APPENDIX B	
CHART OF STUDENT’S EXPERIENCE WITH BULLYING NATIONALLY AND IN DIFFERENT STATES .....	161
APPENDIX C	
CHART OF STUDENT’S EXPERIENCE WITH BULLYING NATIONALLY .....	162
APPENDIX D	

BREAKDOWN OF REGIONS WITHIN THE UNITED STATES THAT SELF-IDENTIFY AS FUNDAMENTALIST .....	163
APPENDIX E1 THE MODERN HOMONEGATIVITY SCALE-GAY MEN.....	164
APPENDIX E2 THE MODERN HOMONEGATIVITY SCALE-GAY LESBIANS.....	166
APPENDIX F INSTRUCTIONS FOR THE IAT .....	168
APPENDIX G INTERNAL AND EXTERNAL MOTIVATION TO RESPOND WITHOUT PREJUDICE SCALE (IMS AND EMS) .....	171
APPENDIX H DEMOGRAPHICS .....	173
APPENDIX I QUESTIONS ABOUT TEACHER’S SCHOOL.....	175
APPENDIX J MORRISON & MORRISON, 2002; STUDY 2 .....	177
APPENDIX K INFORMATION AND IMPLIED CONSENT ABOUT THIS STUDY .....	178
APPENDIX L THANK YOU MESSAGE PLACED ON GIFT CERTIFICATE .....	180

LIST OF FIGURES

Figure	Page
1.....	72
2.....	72
3.....	73

LIST OF TABLES

Tables	Page
1.....	68
2.....	76
3.....	78
4.....	80
5.....	82
6.....	93
7.....	94

## CHAPTER ONE

## Background of the Study

*The Misunderstood Sexual Orientation*

Many countries across the world, including the Netherlands, Belgium, Canada, Spain, South Africa, Norway, Sweden, Argentina, Iceland, and Portugal, understand homosexuality as a normal variant of human sexuality and recognize same-sex marriage as equal with heterosexual marriage (Chamie & Mirkin, 2011). The United States government continues to base their policies and practices on old and inaccurate “science”, which is evident in the lack of protection and equal treatment for this minority population in regard to housing, employment, marriage, adoption, and hate crime status. Lipkin (1999) stated that “societal ignorance and fear still restrict appropriate responses to the urgent needs of homosexual youth and adults” (p. 11). The absence of the civil rights for sexual minorities, fostered by the federal government, cultivates all manners of discrimination, thereby authorizing the debasement of sexual minorities in the form of verbal and physical abuse perpetuated by children and adults alike (Human Rights Campaign, 2012).

It is well documented that prejudices against marginalized populations elicit undue stress that can translate into mental health morbidity and physical health problems (Brooks, 1981; Cochran, 2001; DiPlacido, 1998; Hatzenbuehler, 2009; Herek, 2000; Krieger & Sidney, 1997; Mays & Cochran, 2001; Meyer, 1995; Meyer, 2003; Pascoe & Richman, 2009). A proven counter factor to this is the presence of a positive support system, which can come in the form of family, friends, and social organizations, among other avenues. A positive support system gives minority populations people to discuss

their struggles with, and an environment that can be encouraging and empowering (Hatzenbuehler, 2009, Meyer, 2003, Pascoe & Richman, 2009).

This quantitative study aimed to investigate the implicit and explicit attitudes of middle and high school teachers' towards homosexuality. I measured teachers' internal and external motivations to respond without prejudice toward sexual minorities. Questions pertaining to teachers' prior education about sexual minorities and the presence of protective factors for sexual minorities within their schools were also investigated. Such protective factors included, but were not limited to, anti-harassment and/or anti-discrimination policies in general and/or specific for sexual minorities and supportive clubs for LGB youth within the schools. Lastly, I analyzed the relationships between the independent and dependent variables.

#### *Sexual Minorities' Mental and Physical Health Problems*

For many decades, behavioral health professionals have acknowledged the negative impact, both mentally and physically, that discrimination has on sexual minorities. The term sexual minority is defined as an individual who does not identify as heterosexual (Almeida, Johnson, Cotliss, Molnar & Azrael, 2009; Birkett, Espelage & Koenig, 2009; Bontempo & D'Augelli, 2002; D'Augelli, Pilkington & Hershberger, 2002; Espelage, Aragon, Birkett & Koenig, 2008; Frable, Wortman, & Joseph, 1997; Hershberger & D'Augelli, 1995; Kosciw, et al., 2008; Martin & Hetrick, 1988; Murdock & Bolch, 2005; Russell, Seif & Truong, 2001; Swearer, Turner, Givens & Pollack, 2008). A number of theoretical models about sexual minorities exist describing how stigma, psychopathology, and/or health problems relate to each other. Three such models, the minority stress model, the psychological mediation framework, and

perceived discrimination-health model are discussed below. All three models point to positive support systems being a mediator and moderator toward creating a healthier wellbeing for stigmatized populations such as lesbian, gay and bisexual (LGB) youth (Hatzenbuehler, 2009, Meyer, 2003, Pascoe & Richman, 2009).

The majority of studies suggest that LGB youth experience greater mental anguish than their heterosexual counterparts due to increased stressors (Cochran, Stewart, Ginzler, & Cauce, 2002; Elze, 2002; Lewis, 2009; Meyer, 2003, Milburn, Ayala, Batterham, & Rotheram-Borus, 2006; Sandfort, de Graaf, Bijl, & Schnabel, 2001; Savin-Williams, 1998; Spirito & Esposito-Smythers, 2006; Walls, Hancock, & Wisneski, 2007; Willoughby, Doty, & Malik, 2010; Whitbeck, Chen, Hoyt, Tyler, and Johnson, 2004). There are many developmental challenges beyond what is experienced by heterosexual youth that sexual minority youth must negotiate. One such challenge is adapting emotionally to their identity as lesbian, gay, or bisexual. A second is seeking and establishing a positive support system of both gay and non-gay individuals (Cass, 1979).

The Gay, Lesbian, and Straight Education Network (GLSEN) is a leading national education organization focused on safety for all students, but specifically lesbian, gay, bisexual, and transgender (LGBT). As such, GLSEN has conducted many research studies to help focus their educational agenda. To help sustain objectivity, GLSEN's studies are often conducted by independent market research firms, such as Harris Interactive Inc. The information collected in their studies serves as a resource for other organizations that discuss LGBT health issues, such as the Center of Disease Control and Prevention (CDC). GLSEN (2010) sponsored a study which had a nationally represented sample of 7,261 middle and high school students who all identified as gay, lesbian,

bisexual, and/or transgender. In this study 9 out of 10 individuals who identified as LGBT experienced harassment at their school in the last year. Of these individuals who were sampled two-thirds felt unsafe because of their sexual orientation and one-third had skipped at least one day of school in the past month due to safety concerns. It was established that sexual minorities, within this study, who had higher levels of harassment also had higher levels of anxiety and depression and lower levels of self-esteem. The grade point averages (GPAs) of these individuals' were also found to be lower than their lesser harassed peers (Kosciw, Greytak, Diaz, & Bartkiewicz, 2010).

The influence of mental and physical victimization or the anticipation of mental and physical victimization, on sexual minority youth has been previously explored. Most research articles about LGB youth focus on suicidal ideation, suicidal attempts, and drug and alcohol usage (see for example, Cochran, Stewart, Ginzler, & Cauce, 2002; Lewis, 2009; Milburn, Ayala, Batterham, & Rotheram-Borus, 2006; Spirito & Esposito-Smythers, 2006; Walls, Hancock, & Wisneski, 2007; Whitbeck, Chen, Hoyt, Tyler, and Johnson, 2004). When mental health issues were studied, symptom or distress scales were primarily used. These scales supported the notion that sexual minorities experience more affect symptomology, suicidality, and substance abuse than their heterosexual counterparts (Meyer, 2003; Sandfort, de Graaf, Bijl, & Schnabel, 2001). The two most common affective problems are depression and anxiety (Elze, 2002; Savin-Williams, 1998; Willoughby, Doty, & Malik, 2010).

Two published studies to date have used structured diagnostic interviews to ascertain psychopathology among sexual minority youth. The first study, conducted by Fergusson, Horwood, & Beautrais (1999), sampled 979 heterosexual youths and 28 LGB

youths. The results demonstrated that LGB youths had approximately a four times greater probability of experiencing major depression and conduct disorder (Fergusson, Horwood, & Beautrais, 1999). The second study, led by Mustanski, Garofalo, & Emerson (2010), which did not have a comparative heterosexual sample, interviewed 246 lesbian, gay, bisexual, transgender (LGBT) youths age 16 to 20. One third met criteria for some type of mental disorder. Of these individuals 17% met criteria for conduct disorder, 15% for major depression, and 9% for posttraumatic stress disorder. Lifetime suicide attempts were present among 31% of the LGBT youth. While the researchers found higher rates of mental diagnoses of LGBT youth as compared to the national samples, the study showed similar incidence among urban and racial/ethnic minority youth (Mustanski, Garofalo, & Emerson, 2010).

This study demonstrates that sexual minorities are apt to have more negative health problems and make poorer health decisions as compared to their heterosexual counterparts. A meta-analysis, which included 16 state/regional youth studies of sexuality and health related issues of sexual minorities, found that in the general population roughly 3.4 % to 18 % identify as sexual minorities. The states and provinces in this study included Minnesota, Massachusetts, Vermont, Washington, British Columbia, and Boulder County in Colorado. The studies were extracted from a time period between 1995 and 2007. LGB adolescents, in the US cases, were 1.5 to 2.0 times more likely to engage in binge drinking in the past month as opposed to their heterosexual peers. Study results indicate that alcohol and cocaine are the most widely abused drugs for non-heterosexuals. LGB respondents were 3-8 times more likely to have used cocaine in the past month as compared to their heterosexual counterparts. This study investigated both suicidal

ideations and suicide attempts. Non-heterosexual youth were two times as likely as heterosexual youth to experience suicidal ideations. Suicidal prevalence of heterosexual youth respondents ranged from 3% to 13%. LGB youths' suicidal attempts were substantially higher, averaging between 9% and 44% (Lewis, 2009).

Also a factor in the use of alcohol and cocaine is the presence of family abuse. Studies show that in the US and Canada sexual minority youth have a higher risk for family abuse than their heterosexual youth counterparts (Saewyc et al., 2006). Hunter (1990) found that more than 60% of violence toward sexual minority youth was committed by a family member. While Lenz-Rashid (2006) found that 33% of LGB youth had been verbally abused and 10% physically assaulted by family members. As such, there is an over-represented number of LGB youth in the homeless population and public child welfare system, in part due to family rejection and abuse related to their sexual orientation (Lambda Legal, 2001; Walls, et al., 2007).

Different studies give varying estimates for the sexual minority homeless youth population that range from 6% to 35% (Kruks, 1991; National Network of Runaway and Youth Services, 1985; Tenner, Trevithick, Wagner, & Burch, 1998). Whitbeck et. al., (2004) stated:

Regardless of sample differences, there appears to be a general consensus across studies that approximately 20% of homeless and runaway adolescents are gay, lesbian, or bisexual in larger magnet cities (e.g., Los Angeles, San Francisco, Seattle) with perhaps a slightly lower proportion in smaller, non-magnet cities (p. 330).

Additionally, sexual minority homeless youth have higher rates of psychopathology and health concerns than heterosexual homeless youth or non-homeless youth. Depressive symptomology, suicidal ideations and attempts, as well as Post Traumatic Stress Disorder (PTSD) diagnoses, were higher among LGBT homeless youth than their heterosexual homeless counterparts (Cochran, Stewart, Ginzler, & Cauce, 2002; Spirito & Esposito-Smythers, 1006; Whitbeck et al., 2004). LGB homeless youth engage in higher rates of survival sex, especially among the gay and bi-sexual males, and substance abuse than their heterosexual homeless peers; and as a result, these youth have an increased risk of HIV and other sexually transmitted diseases (Wall, et al., 2007). Survival sex is one way these children bargain for food and shelter. Not surprisingly, a history of participating in survival sex increases depressive symptomology (Milburn, Ayala, Batterham, & Rotheram-Borus, 2006).

Lenz-Rashid (2006) studied former foster care participants and found that, at intake, 34% identified as LGBT. Suicide rates for the US child welfare system are scant, but these children do have higher rates of major clinical depression as compared to community samples of youth (Garland et al., 2001). An international study was able to give estimates of suicide attempts. A Swedish national cohort study reported that former child welfare clients who identified as non-heterosexual were 5 to 8 times more likely to attempt suicide that required medical attention than peers in the general population (Vinnerljung, Borcyskowski, Hjern, & Lindblad, 2006).

As these youth age, they carry their problems into adulthood. Lewis (2009) conducted a meta-analysis that included 12 national adult studies measuring variations among mental health outcomes between gay men and heterosexual men. These studies

were extracted from the United States, United Kingdom, Austria, and the Netherlands between 1999 and 2007. All the studies showed a disparity between the mental health of gay men and heterosexual men; with homosexuals displaying higher rates in categories such as depression, generalized anxiety disorder, panic disorder, eating disorders, and drug and alcohol dependencies within the past year (Lewis, 2009).

Meyer conducted a meta-analysis of ten different studies to extract information about the LGB population. Adult gay men and lesbians have a 2.5 times greater chance for mental health problems during their lifetime (Meyer, 2003). When the gay and lesbian adult population is compared to the heterosexual adult population, the non-heterosexuals continue to have higher rates of substance use disorders, affective disorders, and suicidality (Cochran, 2001; Gilman et al., 2001; Herrell et al., 1999; Sandfort, et al., 2001).

Nearly 30 years ago, the Committee on Adolescence of the American Academy of Pediatrics (1983) concluded that “the difficulties faced by lesbian and gay youths are the result of defects in the way society treats sexual minorities, not defects in these teens” (American Academy of Pediatrics, 1983; Owens, 1998, p. 55). In 1998, a coalition of national organizations were formed to help protect the gay, lesbian, and bisexual youth in order to give officials who are in contact with youth correct and accurate information about working with sexual minorities. Organizations that support the coalition included the American Academy of Pediatrics, the American Counseling Association, the American Association of School Administrators, the American Federation of Teachers, the American Psychological Association, the American School Counselor Association, the American School Health Association, the Interfaith Alliance Foundation, the National

Association of School Psychologists, the National Association of Secondary School Principals, the National Association of Social Workers, the National Education Association and the School Social Work Association of America. This working group reiterated what the Committee on Adolescence of the American Academy of Pediatrics (1983) stated, highlighting the fact that marginalization and discrimination “negatively affects the health, mental health, and education of those lesbian, gay, and bisexual young people who experience it” (Just the Facts Coalition, 2008, p. 3-4).

### Theoretical Framework

#### *Minority Stress Theory*

Stress can be defined as, “any condition having the potential to arouse the adaptive machinery of the individual” (Pearlin, 1999, p. 163). Stress can be acute, such as the body’s response to a perceived threat, or chronic, which is ongoing and prolonged emotional and physical stress (Robbins, Powers, & Burgess, 2005). Stressors are circumstances that prompt an individual to make adjustments. Individuals can endure personal stressors, described as personal events, and/or social stressors, things in the social environment (Meyer, 2003).

Meyer (2003) hypothesized that the higher prevalence of psychopathology among LGB individuals is due to the unique type of social stress, termed minority stress, which sexual minorities must endure. Minority stress theory postulated that stigma, prejudice, and discrimination creates a toxic social environment that causes an increased likelihood of mental health issues for minority individuals, meaning those “related to low socioeconomic status, racism, sexism, or homophobia” (Meyer, 2003, p. 675). Meyer posited that minority stress contains the following assumptions:

1. Unique – that is, minority stress is additive to general stressors that are experienced by all people, and therefore, stigmatized people are required an adaptation effort above that required of similar others who are not stigmatized
2. Chronic – that is, minority stress is related to relatively stable underlying social and cultural structures
3. Socially based- that is, it stems from social processes, institutions, and structures beyond the individual rather than the individual events or conditions that characterize general stressors or biological, genetic, or other nonsocial characteristics of the person or the group (p. 676).

Meyer described the minority stress model in terms of distal stressors and proximal stressors (2003). Distal stressors are considered “prejudice-inspired events” such as victimization in the form of physical abuse, sexual assault, and/or employment discrimination, among others (Hatzenbuehler, 2009, p. 710). Distal stressors are objective events or conditions while proximal stressors are subjective and depend on an individual’s perceptions or appraisals. Examples of proximal stressors include expectations of rejection, concealment, and/or internalized homophobia (Meyer, 2003).

#### *General Psychological Mediating Process*

Hatzenbuehler (2009) expanded on Meyer’s minority stress theory by formulating the general psychological mediating process. Hatzenbuehler posited that general psychological processes that cause mental health morbidity in heterosexuals will also cause psychopathology in sexual minorities. Hatzenbuehler developed three critical hypotheses of the general psychological mediating process:

1. Sexual minorities confront increased stress exposure resulting from stigma

2. This stigma-related stress creates elevations (relative to heterosexuals) in general emotion dysregulation, social/interpersonal problems, and cognitive processes conferring risk for psychopathology
3. These processes in turn mediate the relationship between stigma-related stress and psychopathology (p. 713).

Hatzenbuehler separated the three mental health disorders of depression, anxiety, and alcohol use disorder, which are the most common among sexual minorities, into internalizing and externalizing realms. Internalizing disorders include depression and anxiety while externalizing disorders include alcohol use disorders (Hatzenbuehler, 2009). Hatzenbuehler admitted that there are a number of different psychosocial processes that may impact the relationship between stigma-related stress and mental health morbidity, but hypothesized that coping and emotion regulation processes, social/interpersonal processes, and cognitive processes contain the “strongest empirical support as risk factors” (Hatzenbuehler, 2009, p. 713).

#### *Coping/emotional Regulation*

*Internalizing disorders.* The psychosocial process of coping for a sexual minority is more complex than for many heterosexuals. The chronic stress experienced by sexual minorities, along with what average individuals must endure, can overextend the non-heterosexual’s coping resources over time, which leaves the person more vulnerable to depressive and anxiety disorders. This vulnerability is what can cause emotional dysregulation; one of the most likely aspects of such is rumination (Hatzenbuehler, 2009).

Rumination is defined as “a maladaptive emotion regulation strategy in which an individual passively and repetitively focuses on his/her symptoms of distress and the circumstances surrounding these symptoms” (Hatzenbuehler, 2009, p. 716). Chronic stigma-related stress has the potential to morph into hypervigilance, which is a facet of rumination. One of the primary reasons for this change to hypervigilance is an individual’s expectation of rejection (Major & O’Brien, 2005; Mays, Cochran, & Barnes, 2007; Mendoza-Denton, Downey, Purdie, Davis & Pietrzak, 2002). The second possible reason for hypervigilance occurs when the sexual minority individual attempts to conceal his/her identity, which causes frequent self-monitoring (Pachankis, 2008). The third reason would be attributed to the non-heterosexual’s constant evaluation of his/her environment and decision about when and whether to divulge his/her stigmatized identity (Lyubomirsky, Tucker, Coldwell, & Berg, 1999). All three of the above experiences contribute to rumination, which evolves due to depletion of one’s coping resources; it causes emotional dysregulation, which in turn makes the individual vulnerable to depression and anxiety disorders (Hatzenbuehler, 2009).

*Externalizing disorder.* Alcohol can be used, at times, as a coping motive for stress (Ham & Hope, 2003; Park, Armeli, & Tennen, 2004). More specific to the sexual minority, alcohol has been found to be used as a coping motive for stigma-related experiences (Bux, 1996; Greeley & Oei, 1999). As with the above mentioned disorders of anxiety and depression, the individual’s coping resources are overextended, which in turn prompts an individual to seek alcohol in an attempt to regulate the negative effects caused by discrimination (Diaz et al., 2001; Herek, Gillis, & Cogan, 1999; Kessler, Mickelson, & Williams, 1999; Mays & Cochran, 2001; Meyer, 1995). Another mediator of

discrimination relating to alcohol, in terms of negative affect and drinking motives includes alcohol expectancies (Hatzenbuehler, Corbin, & Fromme, 2008). It has been established that alcohol expectancies, the belief that alcohol will cause a positive effect, is greater in LGB young adults than in heterosexuals. This may contribute to the increased use of alcohol as a coping mechanism (Hatzenbuehler, Corbin, & Fromme, 2008; Ziyadeh et al., 2007).

### *Social/Interpersonal*

*Internalizing disorders.* Social and interpersonal processes have been found to possess both a moderating and a mediating effect on psychopathology due to stigma-related events. A moderator is “an independent variable that affects the strength and/or direction of the association between another independent variable and an outcome variable” (Bennett, 2000, p. 416) A mediator is a variable that explains “how associations occur between an independent variable and an outcome variable” (Bennett, 2000, p.416). The presence of family, school, and peer support have been found to help the sexual minority to withstand discrimination, which in turn helps in defending against mental health morbidity (Cohen & Willis, 1985; Goldfried & Goldfried, 2001; Kawachi & Berkman, 2001; Radkowsky & Siegel, 1997; Walls, Freedenthal, & Wisneski, 2008). Unfortunately, sexual minorities have been found to have less and lower satisfaction with their social support networks than heterosexuals (Eisenberg & Resnick, 2006; Ploderl & Fartacek, 2005; Safren & Heimberg, 1999).

As a mediator, discrimination could cause the sexual minority to isolate or conceal their stigma in fear of rejection (Link, Struening, Rahav, Phelan, & Nuttbrock, 1997). While many individuals under stress seek support, the sexual minority may avoid

close relationships (Pachankis, 2008). Even though avoidance helps the LGB individual bypass rejection, the secret keeping initiates its own negative effects on the individual (Kelly, 1998). Hatzenbuehler (2009) writes that “secret-keeping leads to more loneliness, introversion, and social anxiety, compared with those who do not keep secrets” (p. 717). The psychological mediation framework contends that social and interpersonal processes are negatively affected by discrimination and causes the sexual minority to be exposed to an increased possibility of experiencing depressive and anxiety disorders (Hatzenbuehler, 2009).

*Externalizing disorder.* The psychological mediation framework speculates that social norms of LGB individuals are more permissive of alcohol use among their social networks (Hatzenbuehler, 2009). For the older generation of sexual minorities, a gay bar was a comfortable and safe atmosphere ideal for individuals to socialize (Heffernan, 1998). McKirnan and Peterson (1988) conducted a study and found that stigma-related events translated into the use of bars as the dominant social setting for these gay men. The use of bars as sexual minorities’ safe haven was found to lead to increased alcohol-related problems among gay men in this study (McKirnan & Peterson, 1988). In contrast, for younger sexual minorities, studies have found that the presence of permissive alcohol use took place in adolescence, before the use of bars (Crosby, Stall, Paul, & Barrett, 1998). At this point, research on this younger generation has not established whether it can be accounted for due to stigma-related stressors. Hatzenbuehler noted that the relationship between discrimination and drinking behaviors as a mediator has only one current study to support the findings (Hatzenbuehler, 2009).

### *Cognitive*

*Internalizing disorders.* In the psychological mediation framework cognitive processes are defined as “both the content of thoughts as well as the process of thinking” (Hatzenbuehler, 2009, p. 718). Hatzenbuehler speculated that a number of cognitive mechanisms, such as hopelessness, pessimism, and negative self-schemas, are to blame for the increased risk of depression and anxiety in sexual minorities. Hopelessness is defined as the belief that negative events will occur with or without the individual’s interception of the event (Abramson, Metalsky, & Alloy, 1989). Pessimism is related to an individual’s belief that the future holds a negativity that spans to a number of different areas of one’s life (Chang, 2001; Scheier & Carver, 1985). Negative self-schemas are defined as a negative view of the self. One of the connecting aspects of these cognitive mechanisms is how they evolved. All arise due to the “chronic exposure to discrimination, rejection, and abuse” that continue to be present on account of society’s unwillingness to intercede for the sexual minority (Hatzenbuehler, 2009, p. 719). All three are theorized to be mediators of stigma-related events and psychopathology, yet some have only been tested and verified as moderators (Hatzenbuehler, 2009).

*Externalizing disorder.* In the psychological mediation framework, Hatzenbuehler theorizes that there are two different cognitive processes, drinking motives and alcohol expectancies that perpetuate sexual minorities toward an alcohol problem (Ham & Hope, 2003). Alcohol expectancy theory posits that the at-risk individual’s positive outcome expectancies from drinking alcohol outweigh the negative, which in turn may add to an individual’s coping motives for drinking. Positive outcome expectancies include the individual’s belief that alcohol will have a positive effect on their self, such as “increased sociability and decreased tension” (Hatzenbuehler, 2009, p. 720). Negative outcome

expectancies is an individual's thought that alcohol will have a negative effect on their self, such as "cognitive or behavioral impairment" (Hatzenbuehler, 2009, p. 720; Goldman, Brown, & Christiansen, 1987).

*Perceived Discrimination-Health Theory*

Perceived discrimination-health theory focuses on the direct link between perceived discrimination and health/health behavior/physiological stress responses/psychological stress responses. Pascoe and Richman (2009) hypothesized that perceived discrimination has a significant relationship with the following:

1. Both mental and physical health outcomes
2. Causal pathways for heightened psychological and physiological stress responses
3. Increased participation in unhealthy behavior and decreased participation in healthy behaviors (p. 533).

Pascoe and Richman (2009) reported that through their meta-analysis all three hypotheses showed a significant response to perceived discrimination.

The perceived discrimination-health model reports that discrimination causes both mental and physical health problems due to "heightened psychological and physiological stress responses" (Pascoe & Richman, 2009, p. 533). Heightened psychological stress can cause mental illnesses such as depression and anxiety (Williams, Neighbors, & Jackson, 2003; Paradies, 2006). Increased physiological stress can cause our bodies to undergo a process called General Adaptation Syndrome (GAS) to adjust to the situation at hand. During GAS our body releases such chemicals as adrenaline and cortisol to both increase our body's energy and fight inflammation.

This process starts in the brain and then moves to the organs. When an individual is under constant stress and the chemicals “remain at high levels” they can “damage the heart and blood vessels, suppress the functioning of the body’s disease-fighting immune system, and thus promote illnesses ranging from heart disease, high blood pressure, and arthritis to colds and flu” (Bernstein, Clarke-Stewart, Roy, & Wickens, 1997, p.434). Further, the discrimination-health model posited that perceived stigma-related events leaves “less energy and resources” for the LGB individual to make “healthy behavior choices” such as “cancer screening, diabetes management, and condom use” and leads to the individual being more susceptible to unhealthy behaviors such as over-eating, smoking, unprotected sex, alcohol, and substance abuse (Bennett, Wolin, Robinson, Fowler, & Edwards, 2005; Inzlicht, McKay, & Aronson, 2006; Landrine, Klonoff & Alcaraz, 1996; Martin, Tuch, & Roman, 2003; McSwan, 2000; Pascoe & Richman, 2009; Ryan, Gee, & Griffith, 2007; Yen, Ragland Grenier, & Fisher, 1999; Yoshikawa, Wilson, Chae, & Cheng, 2004).

One limitation of this meta-analysis was that the findings were based on “a disproportionate number of studies that examined race-based discrimination” (Pascoe & Richman, 2009, p. 546). Within the text the researchers only mentioned one study about the homosexual population, specifically one that sampled males that identified as gay and were of Latino decent. This study confirmed that gay Latino men who discussed their plight with discrimination with family and friends were less likely to participate in unprotected intercourse than individuals who had infrequent conversation about such with family and friends (Yoshikawa et al., 2004).

Two studies that were not included in the above meta-analysis, but do support the presence of increased health problems for LGB individuals, will be discussed next (Malterud et al., 2009; Rosario, Hunter, and Gwadz, 1997). The majority of research conducted on lesbian health issues has been extracted from studies using self-recruited or convenience-based samples (Bailey, Farquhar, Owen, & Whittaker, 2003; Burgard, Cochran, & Mays, 2005; Hegna, Kristiansen, & Moseng, 1999; Malterud, 2004; Solarz, 1999). With that limitation in mind, research has suggested that lesbians have an increased risk of mental health problems, eating disorders, bacterial vaginosis, particular cancers, obesity, smoking, and alcohol use (Malterud, Bjorkman, Flatval, Ohnstad, Thesen, & Rortveit, 2009)

Additionally, LGB youth have been shown to have higher rates of alcohol and illicit drug use. Rosario and colleagues (1997) controlled for other theoretical causes to the increased rate of substance use, but concluded that stress and the complications of growing up gay were the most likely reason for the increased rates of substance use. Although studies have not been able to show a direct link between stress and LGB youth's risky sexual behavior, many scholars believe that it is related. Risky sexual behavior can cause an increased exposure to HIV and other sexually transmitted diseases (Remafedi, 1994a; Remafedi, 1994b; Rotheram-Borus & Koopman, 1991; Savin-Williams, 1990; Savin-Williams & Lenhart 1990).

#### Statement of the Problem

This quantitative study aimed to investigate the support system available to lesbian and gay youth within the schools of South Carolina by measuring middle and high school teachers' implicit and explicit attitudes toward homosexuality, as well as

their internal and external motivation to respond without prejudice toward sexual minorities. Inquiry into current external motivations within these teachers' schools, such as non-discrimination and/or anti-harassment policies or Gay/Straight Alliance groups that promote tolerance and acceptance of sexual minority youth will be posed. Questions pertaining to teachers' prior education about sexual minorities, as well as the believed effectiveness of resources meant to assist teachers be better prepared to support sexual minorities, will also be addressed.

### Significance of the Study

This research has the ability to effect change in both the fields of Social Science and Education. Specific to social work it has the potential to impact policy, practice, research, education and/or advocacy. Benefits of this study include the ability to identify the variables with the strongest correlation to anti-lesbian and anti-gay attitudes, subsequently revealing target variables for future interventions. It also has the capacity to add to the knowledge base comparing and contrasting implicit and explicit attitudes toward the gay and lesbian population. Another potential avenue of gain includes increased awareness of South Carolina's resources or lack-there-of within their schools for the sexual minority population in comparison to national statistics. Finally, it can identify whether South Carolina teachers are motivated to control their biased behaviors toward sexual minorities; and if so, whether it is prompted by internal or external motivation.

## CHAPTER 2: LITERATURE REVIEW

### Variables that Impact Discrimination

This literature review gives an overview of the importance and the positive implications of the teacher and student relationship (Cornelius-White, 2007). It further discusses the significance of one's attitude toward a minority group and possible subsequent behaviors that may ensue (Devine, 1989; Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002; Fazio, Jackson, Dunton, & Williams, 1995). It continues by distinguishing between explicit and implicit attitudes of prejudices, and the importance of measuring both (Akrami & Ekehammar, 2005; Brauer, Wasel, & Niedenthal, 2000; Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Fazio, Jackson, Dunton & Williams, 1995). Probable variables that modify explicit and implicit attitudes of prejudice are also investigated (Schuette & Fazio, 2011). Finally, a review of past research using the Implicit Association Test, explicit attitude scales, and motivation to respond without prejudice toward gay and lesbian individuals is discussed (Fazio & Olson, 2003; Morrison, & Morrison, 2002; Plant & Devine, 1998).

### Resilience

Research has shown that discrimination has the potential to create increased mental and physical health problems for non-heterosexuals (Frable et al., 1997; French et al., 1996; Meyer, 1995; Meyer & Dean, 1998; Mirands & Storms, 1989; Rosario et al., 1997; Rotheram-Borus et al., 1995; Savin-Williams, 1990; Savin-Williams & Lenhart, 1990; Wagner, Brondolo & Rabkin, 1996; Walters & Simoni, 1993; Weinberg & Williams, 1974; Winter et al., 1996). The key word in this statement is "potential," in that the majority of LGB individuals avoid such an end. As mentioned before, sexual

minorities do experience higher levels of stress than the average heterosexual student, but this does not automatically translate into mental and physical health problems. It ultimately depends on the sexual minority's internal and external resources, which can help protect him or her from developing mental and physical disorders. Research on resilience has highlighted protective factors that help deter or reduce LGB individuals' health problems. (Hatzenbuehler, 2009; Link & Phelan, 2001; Meyer, 2003; Russell, 2005; Waldo, 1999).

Researchers have suggested many different ways to protect and treat minority populations coping with social oppression. This protection and treatment is a way for sexual minorities to actively defend against both emotional and physical health problems caused by discrimination. These exist on both social-structural and individual-level interventions. Most researchers agree that a combination of both levels of interventions is necessary to mitigate damage to the minority populations (Goldfried & Goldfried, 2001; Greenberg, 2002; Hatzenbuehler, 2009; Linehan, 1993; Link & Phelan, 2001; Meyer, 2003; Radkowsky & Siegel, 1997; Russell, Seif, & Truongl, 2001; Safren & Rogers, 2001; Waldo, 1999).

The social-structural interventions are relevant on societal and group level involvement. One such societal intervention is governmental protective policies that support the sexual minority in equal and fair treatment (Link & Phelan, 2001; Meyer, 2003). Protection of sexual minorities in the work place and/or schools represents the group type of intervention. Additionally, open and affirming churches, or any positive support system, have been found to be another outlet that has protective factors for non-heterosexuals (Russell et al., 2001; Waldo, 1999).

Individual level interventions include varying types of therapy, dependent upon the need involved. For instance, dialectical behavior therapy and emotion-focused treatments have the potential to help with emotional regulation (Linehan, 1993; Greenberg, 2002). Also, cognitive-behavioral therapy is suggested for the substance abuse problems encountered by sexual minorities (Safren & Rogers, 2001). Furthermore, social support from parents and peers has also been found to help sexual minorities avoid issues pertaining to mental and physical health problems (Goldfried & Goldfried, 2001; Radkowsky & Siegel, 1997).

Teachers have the capacity to be involved in both the social-structural interventions, by advocating protective policies that include sexual orientation at their schools, and the individual level interventions, by being a voice against bullying and providing open support for this minority population. Schools and teachers have the capacity to fulfill both levels of intervention for the betterment, safety, and health of sexual minorities.

#### Teacher's Impact on Students

Poplin and Weeres (1994) conducted a qualitative study that posed the question to students, teachers, cafeteria workers, security guards, parents and administrators, "What is wrong with schooling?" The most common answer addressed human relationships, specifically between teachers and students (Poplin & Weeres, 1994). Lipkin (1999) wrote, "few would argue today that a teacher's role is narrowly academic, and even those may be brought to see the link between students' psychosocial health and their ability to learn" (p. 141).

Cornelius-White (2007) conducted a meta-analysis based on this assumption. It examined 119 studies conducted from 1948 to 2004, which included over 350,000 students. The variables that were coded included 9 independent, 18 dependent and 39 moderators. For the purpose of this evaluation, the variables that are reviewed include the teacher-student relationship as well as positive student outcomes measured through cognitive, affective and behavioral student outcomes (Cornelius-White, 2007). Cornelius-White (2007) found that the correlation between teacher-student relationships and positive student outcomes was quite robust ( $r = .36$ ). This analysis was compelling as prior educational researchers asserted that “no single factor is dominant in determining” student outcomes and that most range between 0.05 and 0.40 (Fraser, Walberg, Welch, & Hattie, 1987, p. 134). It has been speculated that a number of variables that coexist together function more effectively and show higher correlations than when they are isolated individually or into smaller groups. This would account for researchers’ assumptions that variables studied individually or in small groups with correlations greater than  $r = .20$  are “well worth pursuing” while correlations higher than  $r = .30$  “should be of much interest” (Cornelius-White, 2007, p. 130). In essence the relationship between a teacher and student has a large enough impact upon positive student outcome to warrant not only research, but if need be, intervention (Cornelius-White, 2007).

Alexander, Santo, Cunha, Weber and Russel (2011) surveyed 339 Brazilian students, ages 11 to 18 years old, to test the hypothesis that teachers’ positive support can be a moderator in school commitment to students who are victimized or bullied. School commitment was measured by asking students about their academic plans, such as whether they plan to graduate high school or continue to college upon completing high

school. Their hypothesis was supported, and they found that the moderating effect of supportive teachers was even stronger among the youth who were victimized and identified as a sexual minority (Alexander, et al., 2011).

Murdock and Bolch (2005) surveyed 101 students, mostly middle and high school, who identified as sexual minorities, to ascertain whether school climate and adjustment could be moderated by social support. Family and student support were not found to have a moderating effect, but for sexual minorities who were victimized teachers were established as having a buffering effect on an individual's sense of school belonging. School belonging within this study was defined as the students' subjective perception that they were "valued members of their school community"; this sense of belonging was found in past research to have a positive effect on school outcomes (Murdock & Bolch, 2005).

Similarly, GLSEN sponsored research (2009) found that students felt most comfortable talking to school mental health workers about LGBT issues, while only slightly fewer reported a preference for talking to teachers. When asked who they actually had talked to about LGBT issues, the answer was teachers. It is speculated that this discrepancy is possibly due to accessibility. It was also established that the more school staff that students were able to identify as supportive, the less likely they felt unsafe because of their sexual orientation, leading to fewer reported absences. LGBT students who had a greater number of supportive school staff had a greater sense of belonging, higher grade point averages, and higher education aspirations than LGBT students who reported fewer supportive school staff members (Kosciw et al., 2010). A study by Pearson, Muller and Wilkinson (2007) used the nationally representative

surveys by Add Health (Adolescent Health) and AHAA (Adolescent Health and Academic Achievement) to answer questions about same- sex attraction and academic outcomes. These researchers found that students with same-sex attractions were more likely to have lower grades and less likely to feel engaged in school, complete higher level courses, or have expectations of continuing education after high school.

### Explicit and Implicit Attitude

Over time the nature of discrimination has evolved toward many so-called “out-groups.” In other words, blatant and obvious acts of discrimination in the past have become more covert. To describe and measure these changes, social psychologists have responded by creating new theories and research methods (Dasgupta & Rivera, 2006).

The MODE (Motivation and Opportunity as DEterminants of attitude-to-behavior processes) model attempts to incorporate both automatic, spontaneous processes and deliberate ones into the same framework, believing that motivation and opportunity are two factors that determine what will occur (Schuette & Fazio, 2011). An attitude is defined as the relationship between an object and one’s evaluation of the object (Fazio, 2007). Explicit attitudes are “slow and intentional and operate in a conscious mode” (Akrami & Ekehammar, 2005, p. 361) and are measured by asking an individual to self-report attitudes toward a subject matter. These scales are susceptible to social desirability and self-presentational concerns (Brauer et al., 2000; Dovidio et al., 1997; Fazio et al., 1995; Plant & Devine, 1998). Conversely, implicit attitudes are “fast and automatic and operate without intention, often in an unconscious mode” (Akrami & Ekehammar, 2005, p. 361). These are better measured by tasks such as the Implicit Association Test (IAT),

which measures an individual's attitude indirectly and is based on response latency (Greenwald, McGhee, & Schwartz, 1998).

Explicit and implicit attitudes correlate fairly regularly unless the topic is socially sensitive, such as attitudes toward homosexuality. This divergence is said to be associated with a person's motivation and/or opportunity. Motivation refers to an individual's, "desire to be accurate in judgments, the need to belong, and the motivation to avoid appearing prejudiced" (Eno & Ewaldsen, 2010, p. 3). Opportunity refers to how long an individual is given to deliberate on a topic and their available cognitive resources; i.e., the longer the individual has, the more likely the judgment is calculated as opposed to spontaneous (Olson & Fazio, 2009). These calculated or premeditated answers, as discussed above, are susceptible to social desirability and self-presentational concerns. Individuals may be embarrassed about their true bias toward a minority group or fearful of backlash from others who do not have the same biases. They, in turn, give an inaccurate account of their factual attitudes toward the group in question, which then gives researchers false information about the reality of discrimination in the present (Olson & Fazio, 2009).

Plant and Devine (1998) elaborated on internal and external motivation. Internal motivation is one's own desire to control personally unacceptable responses toward marginalized groups. Individuals who are externally motivated are concerned with how others would evaluate them if they responded with prejudices or without prejudices, depending on the individuals' environment and company at the time. Individuals who regulate their bias behavior by not discriminating against an "out-group" due to external

pressure will likely fail regulate their bias in the absence of that pressure (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002).

### Predictability of Prejudicial Behavior

Devine and colleagues (2002) readily endorse that, “to respond without prejudice toward out-group members, an individual must overcome years of exposure to biased and stereotypical information that is likely to influence responses toward out-group members” (Devine, 1989; Devine et al., 2002, p. 835). They further state that some low prejudicial people, as measured by explicit measures, will continue to display prejudicial behavior, because they have not adapted effective regulatory strategies to thwart biased behavior. Fazio and colleagues (1995) found that an individual’s behavior was better predicted by automatic prejudices using priming strategies, a type of implicit test, as opposed to controlled attitudes (explicit attitudes) in regards to racism (Fazio et al., 1995). Further, scholars recognized that automatic prejudicial attitudes gauged subtle biased behaviors toward racial minorities, such as nonverbal and paralinguistic responses, better than more calculated and controlled non-prejudicial attitudes. These nonverbal and paralinguistic responses are frequently beyond ones’ control, unconscious and include physical reactions such as eye contact, body posture, and speech errors (Dovidio et al., 2002; Dovidio et al., 1997; McConnell & Leibold, 2001).

These participants may be displaying microaggressions toward these racial minorities, which is a form of discrimination that can be either conscious or unconscious. Microaggressions, which was first coined by American psychiatrist Chester M. Pierce, are “brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative slights and

insults toward members of oppressed groups” (Nadal, 2008, p. 23; Nadal et al., 2011; Pierce, Carew, Peirce-Gonzalez & Willis, 1977). Nadal and colleagues conducted a qualitative study sampling 26 self-identified LGBT individuals with the mean age of 26 to help identify sexual minorities’ experience with microaggressions. A number of themes emerged from the study, which included: use of heterosexist terminology, endorsement of heteronormative culture/behavior, assumption of universal LGBT experience, denial of the reality of heterosexism, assumption of sexual pathology/abnormality and threatening behaviors. Further, the researchers discussed implications for LGBT youth development and found support that microaggressions do exist toward LGBT youth within the schools. These microaggressions can take many forms in schools and can be witnessed through interaction between students, students and staff members, and administrators and students. Nadal and colleagues (2011) continue by stating, “Faculty and staff must be conscious of the language that they use directly toward students as well as heterosexist remarks that may be overheard” (Kosciw & Diaz, 2006, Nadal, et al., 2011, p.254).

#### Prejudice-reduction Efforts

Recent research has focused on prejudice-reduction efforts and attempted to identify factors that are involved in decreasing bias behavior. As noted above, “decreasing spontaneous stereotype-based (prejudiced) responses and deliberately replacing them with belief-based responses” has proven difficult, even when individuals report low biases on explicit measures (Monteith, 1993, p. 469). The fact remains that there are individuals who rate low on explicit measures, high on implicit measures, and succeed in unbiased behavior. Many scholars believe that the type of motivation an

individual has, whether internal or external, has some bearing on the situation (Monteith, 1993).

It has been shown that “the more internalized or self-determined a goal or value is,” in accord with self-determination theory, the greater the likelihood that an individual will display attitude-behavior consistency (Devine et al., 2002, p. 836; Grolnick & Ryan, 1987; Koestner, Bernieri, & Zukerman, 1992; Ryan, Rigby, & King, 1993; Williams, Grow, Freedman, Ryan, & Deci, 1996; Williams, Rodin, Ryan, Grolnick, & Deci, 1998). When internally motivated individuals are shown the large discrepancies between personal nonbiased standards and actual biased responses, negative self-directed affect ensued such as feelings of guilt and compunction (Plant & Devine, 1998). Pyszczynski and Greenberg (1986, 1987) believe that these feelings then “heighten self-focus, which in turn activates a self-regulatory cycle aimed at reducing discrepancies” (Monteith, 1993, p. 470). Through the repetition of this self-regulatory process, attitude-behavior inconsistencies may be reduced.

Plant and Devine (1998) found that individuals who were externally motivated adjusted their prejudice to conform to social pressure, whereas internally motivated individuals had no such adjustment. Individuals, who are externally motivated to withhold their prejudicial attitudes, but who have no external pressure or little external pressure to do so, will readily display their bias with little fear of repercussions. Examples of possible external motivators include such things as state or school policies that include nondiscrimination toward sexual minorities, coworkers who are motivated to not display prejudices, or GSA (Gay Straight Alliance) clubs within a school (Plant & Devine, 1998).

### The Southern Impact and Lack of External Motivation

A GLSEN sponsored study (2009) showed that schools and communities that had external motivations, such as state or school policies that include nondiscrimination toward sexual minorities, coworkers who are motivated to not display prejudices, or GSA clubs within the schools, featured less victimization of LGBT youth. This demonstrates that external motivation can have a positive impact on this marginalized population. GLSEN sponsored two national studies, one in 2005 and the other in 2009. The 2005 study was conducted by Harris Interactive, which had a nationally represented sample of 3,400 middle and high school students and over 1,000 secondary school teachers. The 2009 GLSEN sponsored study had 7,261 middle and high school students who identified as lesbian, gay, bisexual or transgender. Each study had enough information to create a profile for a number of different states, but South Carolina did not have sufficient participant numbers to be included in either of the studies. The two states that border South Carolina, Georgia to the South, and North Carolina to the North, did participate to the extent to be able to determine an individual profile (Harris Interactive & GLSEN, 2005; Kosciw, Greytak, Diaz & Bartkiewicz, 2010). Data from these two geographically contiguous states can be utilized to speculate what type of environment sexual minorities maybe experiencing in the state of South Carolina.

The following statistics showed three trends that are evident from the review of the national data from two GLSEN sponsored reports. The first trend identified Georgia and North Carolina as having fewer resources for the sexual minorities in their states, in comparison to the national average. The second trend distinguished Georgia and North

Carolina as two states that decreased their resources for sexual minority youth when comparing the 2005 statistics to the 2009 (Harris Interactive & GLSEN, 2005; Kosciw et al., 2010). The last trend recognized South and Mid-western states as having higher rates of victimization and fewer resources in regard to sexual minorities (Kosciw et al., 2010).

In the first trend, statistics comparing Georgia and North Carolina with the national average support the claim that these two states have fewer resources for sexual minorities in their states than the national average. Georgia and North Carolina fell short, by more than 10%, of the 2005 national average and was 15% less than the 2009 national average of the GLSEN sponsored study, with regards to LGBT supportive student clubs. In school safety policies that included sexual orientation, Georgia and North Carolina were close to the national average in 2005 but fell between 5% - 10% below the national average in the 2009 GLSEN sponsored study (Harris Interactive & GLSEN, 2005; Kosciw et al., 2010).

For the GLSEN 2005 study, additional information regarding the climate of the school, from the perspective of the students, was gathered comparing Georgia and North Carolina's profile with the national sample. This additional information exposes more clearly the effects of not having external motivations, such as anti-harassment, supportive and affirming sexual minority clubs, in place. When compared to the national average, Georgia and North Carolina were found to have more teachers that were heard making homophobic remarks, more students to have reported that bullying was a serious problem in school, fewer students to have reported they felt safe in school, and more youth to have refused to tell a school staff person when they were harassed or assaulted in school because they either thought it would make the situation worse or that the staff would not

take action to resolve the incident. Also, when compared to the national average, fewer students in Georgia believed teachers frequently intervened when they heard other students make homophobic remarks (Harris Interactive & GLSEN, 2005) (see Appendix B).

The second statistical trend in comparing data from the 2005 and the 2009 GLSEN sponsored research reports notes Georgia and North Carolina's decreased resources for sexual minority youth. When comparing these two states' statistics from 2005 to 2009, in regard to safety policies for sexual minorities, there is a decrease of 30%. Also, when comparing 2005 and 2009 national statistics there is an increase of the percentage of students who heard teachers make homophobic remarks, a decrease in the percentage of students who believed teachers frequently intervened when they heard other students make homophobic remarks, and an increase in the percentage of LGBT students who did not feel safe in school (see Appendix A). The number of GSA and other supportive clubs for sexual minorities did increase for both states when comparing the data from 2005 to 2009, but remember that although many require a teacher be present during club hours, ultimately these clubs are started by the students, not administrators (Harris Interactive & GLSEN, 2005; Kosciw et al., 2010).

The third trend was identified by the GLSEN sponsored 2009 study, which calculated information by regions, with the Southern and Midwest showing higher rates of victimization of LGBT youth and fewer supportive resources for LGB youth in comparisons to the other regions of the United States (Kosciw et al., 2010). From the above information, it appears that Georgia and North Carolina follow this last trend considering both are located in the South. It was assumed that South Carolina would

similarly follow these trends and have fewer supportive resources for their lesbian and gay youth in comparison to the national averages.

#### Demographic, Attitudinal, Personality Correlates

In the mid-1920s a legal case was brought to court about whether states should be required to teach Darwin's theory of evolution in public school science classes. The term "Bible Belt" was coined by journalist H. L. Mencken during this period. It is still utilized in today's language. Census regions of the United States that make up the geographic area of the Bible Belt include "the West South Central (Texas, Oklahoma, Arkansas, and Louisiana), East South Central (Kentucky, Tennessee, Mississippi, and Alabama), and South Atlantic (West Virginia, Virginia, Maryland Delaware, North Carolina, South Carolina, Georgia, and Florida)" (Barton, 2010, p.470).

The term Bible Belt refers both to the geographical location and the areas' dominant religious beliefs (Barton, 2010). Researchers have found, through social survey question such as, "Do you consider yourself a fundamentalist, moderate or liberal?" that a large percentage of respondents who live in the Bible Belt identify as religious fundamentalists (Barton, 2010, p. 470) (see Appendix D). Fundamentalist Christians believe the Bible is to be taken literally and, in turn, prohibits homosexuality. As such, many fundamentalist Christian leaders teach that homosexuality is so appalling to God "that he rains natural disasters, death, famine, and disease" down to inform his people of his anger (Barton, 2010, p. 472; Linneman, 2005). Similarly, the LGBT population is described as "bad, diseased, perverse, sinful, other, and inferior" (Barton, 2010, p. 465; Herek, 1987; Herek, 2004). Beginning at 10 years old, the age researchers have determined as an individual's first awareness of sexual orientation, LGBT children likely

hear their family, friends, and school reiterate such teachings (Barton, 2010; D'Augelli & Hershberger, 1993; Herek, 2003; Smith, Dermer, & Astramovich, 2005).

Researchers have found that there is a strong, positive association between Religious Fundamentalism (RF) and Right-wing Authoritarianism (RWA), with many correlations approximating .70 (Altermeyer, 2005; Hathcoat & Barnes, 2010, Hunsberger, 1995; Hunsberger, Alisat, Pancer, & Pratt, 1996; Hunsberger, Owusu, & Duck, 1999; Laythe, Finkle, & Kirkpatrick, 2001; Wylie & Forest, 1992). Right-wing Authoritarianism “is characterized by the covaried effect of three attitudinal clusters: submission to authority, authority-sanctioned aggression, and conventional values” (Hathcoat & Barnes, 2010, p.73). Religious Fundamentalists hold the belief that their God is the one true God and that the relationship with their God makes them more privileged among the people. If others have differing beliefs it is because they are aligned with evil forces and should not be trusted (Altermeyer & Hunsberger, 1992, 2004; Hathcoat & Barnes, 2010).

A meta-analysis of 50 different studies, between 1973 to 1998, investigated the relationships of right-wing authoritarianism, dogmatism, social dominance orientation (SDO), and political-economic conservatism (PEC) to attitudes toward homosexuality (Whitley & Lee, 2000). Dogmatism was included in an attempt to capture both right-wing and left-wing authoritarianism (Altermeyer, 1996; Christie, 1991). Dogmatism is a system of ideas or beliefs held as fact, many times without sufficient evidence (Neufeldt & Guralnik, 1988). Social dominance orientation is a belief that your personal group is dominant and superior to all other groups. (Pratto, Sidanius, Stallworth, & Malle, 1994). Political economic conservatism is described as “the belief that traditional political,

economic, and social institutions and policies are better than current innovations and therefore should be protected against change” (Whitley & Lee, 2000, p. 146). The meta-analysis found that all four authoritarianism-related variables showed a statistically significant relationship with anti-gay attitudes. The highest correlation was between RWA and PEC, both of which abound in the Bible Belt (Whitley & Lee, 2000)

Past research has consistently found high levels of sexual prejudices and biases among individuals who are older, less educated, and live in rural communities or are born and raised in rural communities (Herek, 1988; 1994; 1998). Individuals, who know someone who is gay or lesbian, whether that is a friend or family member, show lower levels of sexual prejudice as opposed to people who do not personally know anyone who is a sexual minority. Also, heterosexual women as opposed to heterosexual men show lower levels of sexual prejudice toward gay and lesbian individuals (Herek & Capitano, 1996; Hinrichs & Rosenberg, 2002; Kite & Whitley 1996). Both heterosexual men and women show a more positive view of lesbians as opposed to gay men (Kite & Whitley, 1996; Steffens & Buchner, 2003).

#### Implicit Association Scale and Explicit Attitude Scales Related to Homosexuality

A number of research studies have used the Implicit Association Test in various ways to examine different attitudes and behaviors toward the gay and lesbian population. One of the first was conducted with 101 heterosexual and homosexual men and women, using the IAT modified to represent homosexual couples or heterosexual couples, displayed as photographs, with two explicit scales, a cognitive attitude scale and an affective attitude scale. The cognitive attitude scale consisted of positive and negative statements about homosexuality and statements describing what should or should not be

allowed for gay men and lesbians. The affective attitude scale represented items describing situation or events related to homosexuality with a 5-point affective reaction scale. Upon evaluating the results, the study provided evidence that the Homosexual – IAT and the explicit attitude measures were measuring the same construct. The patterns of group and individual differences across homosexual and heterosexual men and women showed substantial correlations between all measures. This provides evidence to support the convergent and discriminant validity of the Homosexuality – IAT as a measure of implicit attitude. Although the retest correlations were low, the internal consistency of the IAT scores were satisfactory ( $\alpha = .80$ ). The order of groups with positive attitude toward homosexuality began with lesbians, then gay men, heterosexual women and finally heterosexual men. It was found during Banse, Seise and Zerbes's (2001) second experiment that the explicit attitude scales could be manipulated under certain conditions, whereas the implicit could not. This supports claims that the implicit attitude cannot be faked under normal circumstances. The final experiment added an 18 item scale, which was adapted from the Dunton and Fazio (1997) scale, assessing motivation to control prejudiced behavior (Banse, Seise, & Zerbes, 2001). Researchers found that "individuals with negative implicit attitudes explicitly reported negative attitudes only if they had a weak motivation to control prejudiced behavior" (Banse, Seise & Zerbes, 2001, p. 159).

Steffens and Buchner (2003) conducted two studies. The first one used both a modified version of the IAT and an ad-hoc explicit scale. The second study used the modified version of the IAT and the Attitude Toward Gay men scale (ATG) created by Herek. The modified version of the IAT for homosexuality in the second study was separated by using two male names for gay couples and a male and female name for

heterosexual couples. The explicit attitude questionnaire consisted of 28 statements about gay men, sexuality, gender-stereotypic behavior, authoritarianism, conservatism, and sexual orientation of the participants. The IAT scores were compared to the same scores on a delayed retest, the same scores on an immediate retest, and scores on explicit attitude test. The researchers found good internal consistency for the IAT for both studies and low test-retest correlations. The within-occasion internal consistency and the split-half correlation for the IAT were superior to those of the explicit test used. Correlation between the IAT and the explicit test were medium size according to Cohen's (1977) standards (Steffens & Buchner, 2003).

Jellison, McConnel and Gabriel (2004) conducted a number of studies to measure implicit and explicit measures of sexual orientation attitudes, sexual-orientation-related behaviors and beliefs among 79 male participants (36 heterosexual, 43 homosexual). The researchers used the IAT modified for homosexuality and displayed 10 photographs of two men engaged in an embrace or romantic pose, and 10 photographs of a man and a women engaged in an embrace or romantic pose. They used Nungesser Homosexual Attitudes Inventory-general subscale (NHAI-general) created by Nungesser (1983), 16 semantic differential scales, 8 assessed attitudes toward homosexuality and 8 assessed attitudes toward heterosexuality as well as feeling thermometers to assess attitudes toward homosexuality and toward heterosexuality separately. Study one and two found that straight men and gay men showed strong in-group preferences on both implicit and explicit sexual orientation measures, as well as, the two types of scales being related due to them being correlated. Study two used the same scales from study one but added a number of new scales, which included three Heterosexual Identity Scales (Luhtanen &

Crocker, 1992; Nungesser, 1983; Sellers, Smith, Shelton, Rowley, & Chavous, 1998), a 26-item Male Role Norm Scale (Thompson & Pleck, 1986), the 20-item Heterosexual Attitudes Toward Homosexuality scale (HATH) (Larson, Reed, & Haffman, 1980), the 10-item Attitude Toward Gay Men subscale of the Attitudes Toward Lesbians and Gay Men Scale (ATG) (Herek, 1994) (Jellison, McConnell, & Gabriel, 2004). The final two scales included the 33-item Marlowe-Crowne Social Desirability Scale created by Crowne and Marlowe (1960) to assess participants need to respond in a culturally acceptable manner as well as Motivation to Control Prejudice Reactions Scale created by Dunton and Fazio (1997) to measure how strongly participants were motivated to control their expressions of prejudice. It was found that importance of heterosexuality by endorsements of male gender roles mediated the more negative attitudes toward homosexuality by heterosexual men. Correlation was found between motivation to control prejudice against gays and explicit measures of sexual orientation attitudes. No correlations were found between the implicit measure of sexual orientation attitudes, explicit measures of sexual orientation attitudes or general social desirability (Jellison, McConnell, & Gabriel, 2004).

Rohner & Björklund (2006) studied whether self-presentational concerns moderated the relationship between implicit and explicit homonegativity measures. The researchers used the IAT modified for homosexuality and presented pictures categorizing same-sex and different-sex couples related to “homosexual” or “heterosexual”, respectively. They also used a picture rating measure (PRM) that had a rating scale that ranged from 1 (very negative) to 5 (very positive) with the value 3 labeled as neutral. To measure self-presentation concerns, half the participants were told the purpose of the

PRM was to measure their attitudes towards homosexual and heterosexual couples and half were told the scale measured their attitudes towards young and old couples. Lastly they used a Homophobia Scale created by Wright, Adams and Bernat (1999) to measure affective, behavioral and cognitive components of homophobia as an explicit attitudes scale. In the first study, 70 students from a high school in Sweden were recruited. The researchers found that pictures depicting homosexual couples were rated more negatively than heterosexual couples by both groups of participants, but the participants who were instructed to attend to age, as opposed to sexual orientation, rated the homosexual couples more negatively. The positive attitude toward homosexuality increased, although it was still below that toward heterosexual couples, when participants were cognizant that they were rating attitudes toward homosexual and heterosexual couples, while the ratings of opposite-sex pictures were unaffected. On the IAT, participants responded faster in the homosexual negative/heterosexual positive condition than in the heterosexual negative/homosexual positive. The researchers noted that correlations between the PRM and the explicit Homophobia Scale were generally larger than correlations between the PRM and the IAT. The second study recruited 30 heterosexual and 30 homosexual individuals to evaluate whether their sexual orientation had an effect on the IAT as to whether they were measuring actual attitudes or prevalent cultural beliefs regarding homosexuality and heterosexuality. Because the heterosexual participants showed more implicit homonegativity the researchers concluded that attitude is the construct that is being measured (Rohner & Björklund, 2006).

Gabriel, Banse and Hug (2007) evaluated implicit attitudes, explicit attitudes and the motivation to control prejudiced reactions with regard to homosexuality to identify

how joint effects of person and situational factors moderate the attitude-behavior relationship. These researchers used pictures of same-sex couples or opposite-sex couples to relegate the categories of “homosexual” and “heterosexual”, respectively (Gabriel, Banse, & Hug, 2007). Explicit measures included a cognitive attitude scale that consisted of positive and negative statements about homosexuality and an affective attitudes scale that contained items describing situation or events about homosexuality, which then were rated on a five-point affect reaction scale (Gabriel, Banse, & Hug, 2007; Seise, Banse, & Neyer, 2002). To assess motivation, the researchers used a person variable scale, originally created by Dunton and Fazio (1997), which was adapted for this German sample that measured and was called motivation to control prejudiced reactions (MCPR) (Gabriel, Banse, & Hug, 2007). The researchers then measured motivation to control prejudiced reaction by using experimentally manipulated situational cues, the absence (private setting) or presence (public setting) of an experimenter. Four main results followed: (1) the analysis of their data included eliciting more helping behavior in a public social setting as opposed to a private one, (2) the explicit cognitive scale and explicit affective scale, predicted helping behavior, (3) individuals low on motivation to control prejudiced reactions show corresponding implicit and explicit attitudes, yet individuals who rated high on motivation did not, (4) the MCPR and the implicit attitude predicted helping behavior in the public setting only, not the private (Gabriel, Banse, & Hug, 2007). The researchers concluded that, “the results show that the attitude-behavior relationship was in fact moderated by the interaction of social setting and prejudice control” (Gabriel, Banse, & Hug, 2007, p. 377)

Cochran, Peavy, and Cauce sampled substance abuse treatment providers with explicit and implicit attitudes regarding sexual minorities. These researchers again used a modified version IAT using the same guidelines as Banse, Seise, and Zerbes (2001), displaying pictures of same-sex or opposite sex couples to represent homosexual or heterosexual couples, respectively. The researchers used a more modern version of the explicit attitudes scale toward homosexuals by using the Modern Homophobia Scale (MHS) created by Raja and Stokes (1998) and one of the most frequently used measures, the Index of Homophobia (IHP) developed by Hudson and Ricketts (1980). It was found that the IAT and the explicit attitude measures were highly correlated with one another. Of the 46 substance abuse treatment counselors, ten of whom identified as sexual minorities and four marked other, gay men scored as having the most positive attitudes toward sexual minorities, lesbians; heterosexual men and then heterosexual women counselors followed (Cochran, Peavy & Cauce, 2007).

Steffens later continued her research with the use of implicit and explicit attitudes toward homosexuals. She modified the IAT toward homosexuals differently than in her previous study by separating the measure for gay men and lesbian women. She succeeded in doing this by using words that were associated with gay men, lesbian women and heterosexuals, individually. She used the ATG as her explicit measure again but also added the Attitude Toward Lesbians Scale (ATL). In her second and third study she added implicit self-concepts of masculinity or femininity and attitudes toward gender roles. The researcher's studies supported that her modified version of the IAT is able to measure implicit attitudes toward gay men and implicit attitudes toward lesbians. The validity of these measures were correlated with explicit attitudes towards gay men and

lesbians, with composite scores of gender-related beliefs, with attitudes towards women's roles in society, and with one's own sexual orientation. Of the sample of 208 German university students the explicit attitudes were skewed in the positive direction. As with other studies, heterosexual male scores on the implicit scales showed a proclivity toward heterosexual individuals more so than gay or lesbian individuals. Surprisingly, for the heterosexual females, a preference toward heterosexuals over lesbians could not be detected (Steffens, 2005). Another important finding was the notion that the ATLG is not suited to be measuring attitudes about homosexuality among German student samples because "the difference between these attitudes have become too subtle to be detected by the ATLG" (Steffens, 2005, p. 61).

One research study examined a modified version of the IAT for homophobia and the Modern Homonegativity Scale, as will be proposed for this study. This study examined gender differences in attitudes toward gay and lesbian individuals by sampling college students. As predicted, heterosexual women rated gay men and lesbians more positively than heterosexual men did. Within the heterosexual women's sample, lesbians rated higher than gay men, within the heterosexual male sample, lesbians and gay men were rated as more neutral. Conservative religious ideology in regards to the IAT, presented as a variable that determined more negative attitudes toward sexual minorities in heterosexual men. For heterosexual women in reference to the IAT, gender was the variable that determined a more negative attitude. On the explicit scale, MHS, heterosexual women again rated sexual minorities more positively than their heterosexual male counterparts. Political party affiliation and political ideology were variables that determined more negativity with the MHS scale. Father's education and religious

ideology were variables that instigated a more negative attitude for heterosexual men and gender of sexual minorities presented as a variable for a more negative attitude for heterosexual women in the MHS (Batcheler, 2009).

Researchers have supportive data as to which types of individuals are more apt to discriminate. This has merit in itself, but we also need to identify variables that have the potential to decrease prejudicial behaviors. By studying people's attitudes and control strategies, the plight to decrease discrimination toward homosexuality, among other marginalized groups, can be better understood with hopes of more research-based interventions. As more research and understanding develops pertaining toward LGBT youth, better protection can be implemented.

## CHAPTER 3: METHODOLOGY

### Introduction

This chapter addresses the research methods used to perform this study. Research design, questions, hypotheses, sample, instrumentation, and procedure are discussed at length. Examples of the invitation e-mail, questionnaires and task can be found in the appendixes.

### Research Questions and Hypotheses

This study analyzes explicit and implicit attitudes with motivation as a moderator toward homosexuality from secondary school teachers in South Carolina. Based on past research, the questions and hypotheses created for this study include:

1. Is there a significant relationship between teachers' explicit attitudes and implicit attitudes toward homosexuals?

H<sub>0</sub>: There is not a significant relationship between the explicit attitudes and implicit attitudes about homosexuality for the South Carolina teachers.

H<sub>1</sub>: There is a significant relationship between the explicit attitudes and implicit attitudes about homosexuality for the South Carolina teachers.

2. Is the intensity of secondary school teachers' explicit and implicit attitudes toward homosexuality affected by the degree of motivation (internal or external) or lack of motivation to respond without prejudice?

H<sub>0</sub>: The degree of the teachers' motivation to respond without prejudices is not correlated with the intensity of the teachers' explicit and implicit attitudes toward homosexuality.

H<sub>1</sub>: The degree of the teachers' motivation to respond without prejudices is correlated with the intensity of the teachers' explicit and implicit attitudes toward homosexuality.

3. Is there a significant difference between South Carolina's teachers' results in comparison to the national average when measuring the variables that were extracted from the questionnaire given to teachers in the GLSEN (2005) sponsored study, "From teasing to torment: School climate in America, a school survey of teachers and students"?

H<sub>0</sub>: There is no significant difference between South Carolina's teachers' results in comparison to the national average when measuring the variables that were extracted from the questionnaire given to teachers in the GLSEN (2005) sponsored study, "From teasing to torment: School climate in America, a school survey of teachers and students".

H<sub>1</sub>: There is a significant difference between South Carolina's teachers' results in comparison to the national average when measuring the variables that were extracted from the questionnaire given to teachers in the GLSEN (2005) sponsored study, "From teasing to torment: School climate in America, a school survey of teachers and students".

4. Does secondary school teachers' explicit attitudes, implicit attitudes, internal and/or external motivation to respond without prejudice toward sexual minorities differ according to their reported sexual orientation identification, gender, age, race/ethnicity, frequency of religious service attendance, political outlook, political affiliation, the number of LGB individuals that they know, their believed safety of

gay youth, lesbians, gay students who act feminine and lesbian students who act masculine in their schools, teachers' believed obligation of providing a safe and supportive environment for LGB youth, the presence of anti-harassment policies in their schools for all youth and ones specific for LGB youth, past sensitivity training, the presence of Gay/Straight Alliance or other supportive student clubs for LGB individuals in their school, teachers' beliefs in helpfulness of teacher sensitivity training, anti-harassment and anti-discrimination policies, GSA and principle or superintendent openly addressing safety issues?

H<sub>0</sub>: The teachers' explicit attitudes, implicit attitudes, internal and/or external motivation to respond without prejudice toward homosexuality does not differ according to their reported sexual orientation identification, age, gender, race/ethnicity, frequency of religious service attendance, political outlook, political affiliation, the number of LGB individuals that they know, their believed safety of gay youth, lesbians, gay students who act feminine, and lesbian students who act masculine in their schools, teachers' believed obligation of providing a safe and supportive environment for LGB youth, the presence of anti-harassment policies in their schools for all youth and ones specific for LGB youth, past sensitivity training, the presence of Gay/Straight Alliance or other supportive student clubs for LGB individuals in their school, teachers' beliefs in helpfulness of teacher sensitivity training, anti-harassment and anti-discrimination policies, GSA and principle or superintendent openly addressing safety issues.

H<sub>1</sub>: The teachers' explicit attitudes, implicit attitudes, internal and/or external motivation to respond without prejudice toward homosexuality will differ according

to their reported sexual orientation identification, age, gender, race/ethnicity, frequency of religious service attendance, political outlook, political affiliation, the number of LGB individuals that they know, their believed safety of gay youth, lesbians, gay students who act feminine, and lesbian students who act masculine in their school, teachers' believed obligation of providing a safe and supportive environment for LGB youth, the presence of anti-harassment policies in their schools for all youth and ones specific for LGB youth, past sensitivity training, the presence of Gay/Straight Alliance or other supportive student clubs for LGB individuals in their school, teachers' beliefs in helpfulness of teacher sensitivity training, anti-harassment and anti-discrimination policies, GSA and principle or superintendent openly addressing safety issues.

#### Research Variables

The dependent variables of this quantitative study consisted of three scales: The Modern Homonegativity Scale (Morrison & Morrison, 2002), (see Appendix E1 and E2), a modified version of the Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998), (see Appendix F), Internal and External Motivation to Respond Without Prejudice Scale (IMS and EMS, Plant & Devine, 1998) (see Appendix G). Additionally, the study's independent variables included demographic information (see Appendix H) and questions that were extracted from The Gay, Lesbian, Straight Education Network's (GLSEN) study called "*From Teasing to Torment: School Climate in America, A Survey of Students and Teachers*" (Harris Interactive & GLSEN, 2005), (see Appendix I).

#### *Dependent Variables*

Modern Homonegativity Scale for gay men (MHS – G)

Modern Homonegativity Scale for lesbians (MHS – L)

Implicit Association Test (IAT)

Internal Motivation to Respond Without Prejudice Scale (IMS)

External Motivation to Respond Without Prejudice Scale (EMS)

*Independent Variables*

Sexual orientation identification

Gender

Age

Race/Ethnicity

Education level

Frequency of religious service attendance

Political Outlook

Political Affiliation

Affiliation with sexual minorities

School safety beliefs and ways to enhance it

Presence of anti-harassment policies

Past sensitivity training

Presence of Gay/Straight Alliance or other supportive student clubs for LGB individuals

## Logic Model

Problem Statement	Activities	Outcome
Lesbian, gay and bisexual youth experience increased rates of harassment and discrimination, which translates into a number of negative consequences. These negative consequences include increase rates of depression, anxiety, substance abuse, suicidal ideations because of the following social determinants:	Tasks necessary to address social determinants are:	Expected changes as a result of activities targeting social determinants include:
* perceived discrimination	* Anti-discrimination and/or anti-harassment policies specific for sexual orientation	* Decreased rates of depression for lesbian, gay bisexual youth
* lack of positive peer support	* GSA or other positive and affirming clubs for youth	*Decreased rates of anxiety
* lack of positive family support	* Teacher sensitivity training about lesbian, gay, and bisexual youth	*Decreased rates of substance abuse and usage
* Lack of positive and affirming environment within their school	* Teacher training on safe school environments	* Decreased rates of suicidal ideations and attempts
* lack of a positive and affirming adult(s) to talk too	* Positive and affirming educational administrators toward lesbian, gay and bisexual youth	

## Sample

Approximately 275 South Carolina school teachers who taught grades 6 – 12 were desired for this study. The recommended sample size of 268 was suggested with a 5% margin of error, a 90% confidence level and 50% response distribution. The cumulative population of teachers in South Carolina, that being 27,870, was ascertained from the

2011 State Occupation Employment and Wage Estimates from the Bureau of Labor and Statistics (Bureau of Labor and Statistics, 2011). The total number of participants who completed the MHS, IAT, IMS and EMS equaled 94, which equaled a response rate of 0.8%. Further discussion on the response rate is found below under the section titled, "Response Rate." Participation in the study was voluntary. The inclusion criterion consisted of individuals who are currently employed in South Carolina as full-time teachers for any grades between 6 and 12.

### Instrumentation

In order to examine South Carolina's school teachers' (grades 6 – 12) attitudes about homosexuality two types of questionnaires and one task were administered. The following includes information about the questionnaires and task, specifically relating to their validity and reliability.

#### *Modern Homonegativity Scale*

Researchers have identified many strengths and weakness of self-report measures through analyzing past research. One of the most salient includes the respondent's willingness to answer the questions accurately or inaccurately depending on the believed pressure from external sources. It has been found that social desirability and self-presentational concerns both have bearings on the accuracy of the explicit self-report attitudinal measures, as mentioned above (Brauer et al., 2000; Dovidio et al., 1997; Fazio et al., 1995).

Other methodological issues include past researchers' unwillingness to measure attitudes towards gay men and attitudes toward lesbian women separately, believing that both were the same. Kite and Whitley (1996) found, through the use of a meta-analysis of

attitudes toward gay men and lesbians, that researchers commonly used words such as “homosexual” and “gay” believing the participants would automatically include lesbians in their assessment. Yet Black and Stevenson (1984) found laypersons interpreted “homosexual” and “gay” as meaning gay men only.

Other measures, when they did separate attitudes of gay men and lesbian women into two different scales, did not utilize the same questions for each target. Specifically, the Attitudes toward Lesbians and Gay Men (ATLG) asked 10 questions for each scale but one question on each scale differed from the other. The one question that differed for lesbians on the ATLG discussed adoption, and the one question for gay men discussed AIDS (Herek, 1988). Researchers recommend that questions should be identical except for the target in question (Herek, 2004; Morrison & Morrison, 2002).

Also, prejudices against the gay and lesbian population have evolved over time, requiring that new scales be developed that has the capacity to be able to measure these changes. Researchers were seeing discrepancies between what was being reported about present day attitudes toward homosexuals and homosexuality, finding, as measured by scales that were created in the 1980s, that the majority of people did not harbor biased opinions toward sexual minorities, although other indicators suggested that homonegativity continued to be quite common (Balanko, 1998; Schellenberg, Hirt & Sears, 1999; Waldo & Kemp, 1997). What used to be considered the gold standard of measures for attitudes toward non-heterosexuals became less so over time. One needed change to the explicit scales included what types of topics to highlight to capture discriminatory attitudes. Although many measures showed that there were higher rates of prejudices toward homosexuals among individuals with a religious bent, there are those

who were prejudiced against homosexuals for other reasons. Homonegativity captured a different type of bias, one based on societal-level ideologies. Examples of “modern” prejudices include the belief that gay men and lesbians are making illegitimate demands for change, that discrimination does not take place in the present day society against homosexuality and that sexual minorities are failing to assimilate into mainstream culture because of their own doing. Modern versions of attitudes toward homosexuals have the capability to capture both groups within its measure, giving a better gauge of the reality of the situation (Morrison & Morrison, 2002).

The Modern Homonegativity Scale remedies many of the above methodological concerns. To begin with, Morrison and Morrison (2002) replaced the word homophobia with the word homonegativity, due to their assumption that homophobia represented an “old-fashioned” prejudice. Homophobia suggests an irrational fear and psychopathology of the individual with antigay attitudes based on beliefs of immorality and sin (Herek, 2000). Morrison and Morrison (2002) created questions that were relevant to individuals who may be prejudiced against homosexuals for other reasons than just religion, which means they can capture both types of individuals within their scale. They developed the Modern Homonegativity Scale for gay men (MHS-G) and the Modern Homonegativity Scale for lesbians (MHS-L), which separated the measurement of gay men and lesbian women as well as used identical questions, except for the target word, for their scales (Morrison & Morrison, 2002). To help counteract social desirability and self-presentational concerns, an implicit measure was added to this research project.

Morrison and Morrison (2002) conducted four different studies in an attempt to examine the strengths and weaknesses of the scale. The first study’s objective was to test

the scale's reliability, factor structure, and construct validity. The Cronbach's alpha for the 13-items of the MHS were .93. The alpha coefficient for males and females were .91 and .92, respectively. To test the construct validity, the researchers vetted their scale against other scales measuring political conservatism (Gerbner, Gross, Morgan, & Signorielli, 1994; Wagstaff & Quirk, 1983), religious behavior (i.e., frequency of church attendance) and religious self-schema (i.e., how religious an individual perceives him or herself to be) (Gorsuch & McFarland, 1972). It was found that the scale was unidimensional and, as hypothesized, was positively correlated to the other three scales (Morrison & Morrison, 2002). The scores on the MHS correlated positively with self-reported political conservatism for males,  $r = .23$ ,  $p < .001$ , and females,  $r = .53$ ,  $p < .001$ . Self-reported religious behavior correlated positively with MHS scores for males,  $r = .23$ ,  $p < .005$ , and females,  $r = .28$ ,  $p < .001$ . The scores on the MHS correlated positively with religious self-schema for males,  $r = .20$ ,  $p < .05$  and for females  $r = .28$ ,  $p < .001$  (Morrison & Morrison, 2002).

Study two investigated the construct validity of MHS-G and MHS-L. The researchers calculated the alpha coefficients for the MHS, considered the modern version of homonegativity, old-fashioned homonegativity (Morrison, Parriag & Morrison, 1999), the modern sexism scale (Tougas, Brown, Beaton, & Joly, 1995), and old-fashioned sexism scale (Spence, Helmreich & Stapp, 1973; Spence & Hahn, 1997; Swim & Cohen, 1997). The Marlowe-Crown Social Desirability Scale was added to identify whether MHS were influenced by social desirability bias (see appendix I; Reynolds, 1982). They found that the MHS possessed high levels of reliability and was conceptually distinct from their "old-fashioned" counterparts. It was also positively related to modern sexism

and was not correlated with social desirability bias. Finally, they found that correlations were higher between modern forms of prejudice than correlation between modern and old-fashioned forms of bias (see Appendix J). The researchers assessed the dimensionality of the MHS-G and MHS-L, maximum likelihood (ML) factor analyses followed by oblique rotation. The chi-square/degrees of freedom ratio was less than two for both scales and all residuals were less than .10, which supports the unidimensionality of these factor solutions (Morrison & Morrison, 2002).

The final study examined the behavioral expression of homonegativity using an indirect or covert means of detection. The following hypotheses were tested:

1. In the covert condition, high-scorers on the MHS are less likely than low-scorers to sit with a confederate wearing a T-shirt with a visible pro-gay or pro-lesbian slogan (Morrison & Morrison, 2002, p. 30).
2. In the overt condition, high-scorers on the MHS are just as likely as low-scorers to sit with a confederate wearing a T-shirt with a visible pro-gay or pro-lesbian slogan (Morrison & Morrison, 2002, p. 30).

One of the limitations of this study was the small sample size and the inability to compare male and female participants individually. When the researchers combined the two groups their sample size was large enough to evaluate the legitimacy of their hypothesis and found both to be true. The cumulative evidence across the studies sustained M. Morrison and T. Morrison's assumption that their scales, MHS-G and MHS-L, displayed good validity and reliability as a research tool (Morrison & Morrison, 2002).

*Implicit Association Test*

There has been much research in the area of implicit versus explicit attitudes. Research has found that explicit measures are a better predictor of behavior that is not socially sensitive and implicit measures are a better predictor of behavior that is socially sensitive. Due to the socially sensitive nature of attitudes toward homosexuals, a search for an implicit measure that indirectly taps into attitudes was pursued (Dovidio et al., 2002; Dovidio et al., 1997; Fazio et al., 1995; McConnell & Leibold, 2001).

Scholars have created many different ways of measuring attitudes using implicit measures, or rather indirect methods. Some have included word-fragment completion tasks (Hetts, Sakuma & Pelham, 1999; Dovidio et al., 1997; Son Hing, Li & Zanna, 2002; Hense, Penner & Nelson, 1995; Sinclair & Kunda, 1999), stereotype-explanatory bias measure (Hippel, Sekaquaptewa & Vargas, 1997; Sekaquaptewa, Espinoza, Thompson, Vargas, & Hippel, 2002), or the Go/No-Go Association Task (Nosek & Banaji, 2001). A number of different physiological approaches have been used to help evaluate implicit attitudes such as the use of facial electromyography (EMG) (Vanman, Paul, Ito & Miller, 1997), the use of functional magnetic resonance imaging (fMRI) which examined amygdale activation (Phelps, O'Conner, Cunningham, Funayama, Gatenby & Gore, 2000; Hart, Whalen, Shin, McInerney, Fischer, & Rauch, 2000), and cardiovascular reactivity measures (Blascovich, Mendes, Hunter, Lickel, & Kawai-Bell, 2001). These methods have been employed as a way to avoid asking the participant directly for their attitude toward a subject matter (Fazio & Olson, 2003).

Through examining the research for indirect measures of attitudes, the two measures with the most research on their reliability and validity are the priming measures

and implicit association test (Fazio & Olson, 2003). Further investigation finds that the implicit association test is the most widely used method for assessing implicit attitudes. There are over 300 published studies on the interpretation and application of the IAT that speaks to its “utility, validity, and conceptual merit” (Batcheler, 2009, p. 50; Azar, 2008). A larger number of research projects have used the IAT modified to assess attitudes toward homosexuals as opposed to priming measures (Banse, Seise, & Zerbes, 2001; Rohner & Bjorklund, 2006; Steffens & Buchner, 2003; Dasgupta & Rivera, 2006; Jellison, McConnell, & Gabriel, 2004; Steffens, 2005). The researcher will utilize the IAT in the current study due to the ease with which the scale can be modified and the many strengths.

The Implicit Association Test is a self-report measure that is professed to study unconscious thoughts and feelings. It is believed that things that are more strongly associated by some attribute will take less time, as well as incur fewer mistakes to pair together. If, for example, a participant was faster to respond when Good/Flower was paired as opposed to Good/Insect, it would be speculated that there was a stronger association between the former as opposed to the latter (Greenwald, McGhee, & Schwartz, 1998). This IAT will measure the strength of association between the categories of “homosexual” and “heterosexual” with attributes associated with “good” or “bad”.

The strengths and limitations of the IAT have been debated with a lack of consensus among researchers. Greenwald, Poehlman, Uhlmann, and Banaji (2009) conducted a meta-analysis of 122 studies, comprised of 184 independent samples and 14,900 subjects. They estimated the average predictive validity of the IAT to be  $r = .29$

against behavioral criterion. They estimated the average predictive validity of self-report measures to be  $r = .36$  against behavioral criterion. The explicit measures fared better than the IAT predictive validity but it is important to note that for socially sensitive topics “the predictive validity of IAT measures significantly exceeded the predictive validity of self-report measures” (Greenwald et al., 2009, p. 32).

When attempting to extract the validity of the IAT in regards to social sensitive topics, the information related to correlations between IAT and behavior are limited. Validity was most commonly measured by calculating the correlations between other implicit scales and/or explicit scales (Fazio & Olson, 2003). Nosek, Greenwald and Banaji (2007) created a methodological and conceptual review of the implicit association test to further information about this implicit attitudes test. Stronger relations emerge when using disattenuated correlations because the researcher is accounting for the unreliability in the model, by removing measurement error. Cunningham, Preacher, and Banaji (2001) found the disattenuated correlations to range from .53 and .77 between IAT and other implicit measures. Nosek and Banaji (2001) found a disattenuated correlation of .55 between the IAT and the other implicit measure. Nosek and Smyth (2007) investigated 57 different content domains and found the relationship between the IAT and self-report measures disattenuated  $r$  to be .46. Hofman, Gawronski, Gschwendner, Le and Schmitt (2005) conducted a meta-analysis and found estimates of these correlation to be  $r = .24$ .

With regards to reliability, internal consistency estimates of IAT measures, which include either split-half correlations or alphas, range between .7 and .9 (Greenwald & Nosek, 2001; Schmukle & Egloff, 2004). Retest reliabilities are typically found in the

range of .50 to .69 (Bosson, Swann & Pennebaker, 2000). Parallel test reliability of IAT measures have a somewhat large variation between studies showing correlations as low as .43 and as high as .85 (Asendorpf, Banse, & Mücke, 2002; Daasgupta, McGhee, Greenwald, & Banaji, 2000; Greenwald & Farnham, 2000; Greenwald, et al., 1998). On average, the IAT measures internal consistency is higher than its test-retest or parallel test reliability, but when compared to other implicit measures, these coefficients are considerably higher (Bosson et al., 2000).

*Internal and External Motivation to Respond without Prejudice*

The MODE model postulates that motivation and opportunity are both variables that have the capacity to modify one's implicit or explicit attitudes. More specifically, when participants were administered the Modern Racism Scale by an African American who would have access to their answers, fewer prejudicial responses ensued as opposed to their previous assessment, which was anonymous (McConahay, Hardee, & Batts, 1981; Fazio et al., 1995; Jones & Sigall, 1971). It has been theorized that these particular individuals are not internally motivated as much as externally motivated to comply with society's nonprejudiced attitude (Crosby, Bromley & Saxe, 1980; Dovidio & Fazio, 1992; Dovidio & Gaertner, 1991; Jones & Sigall, 1971).

Dunton and Fazio (1997) created a self-report measure of Motivation to Control Prejudiced Reactions (MCPR) toward Blacks with the use of two sub-scales. The first of which measured the amount of motivation present to control prejudice and the second subscale attempted to measure reasons for controlling prejudicial responses, internal or external. Unfortunately, their factor analysis indicated that it failed to differentiate between internal and external motivational factors to control prejudice. They further

reported that through their own research the scale was not “sufficiently focused and distinct to isolate and separate internal versus external concerns” (Dunton & Fazio, 1997, p. 324).

Soon after, Plant and Devine (1998) published information about their new scale that attempted to differentiate between internally and externally motivated individuals to respond without prejudice toward African Americans. They created two scales, the Internal Motivation to Respond without Prejudice Scale (IMS), based on standards imposed on oneself, and the External Motivation to Respond without Prejudice Scale (EMS), based on standards imposed by others. Through statistical analysis, they found that their scale was sensitive enough to differentiate between internally and externally motivated individuals (Plant & Devine, 1998). For this reason, the IMS and EMS were the scales used for this research project.

The Internal and External Motivation to Respond without Prejudice are two separate scales of five questions each. Plant and Devine (1998) tested three different samples to modify and test the validity and reliability. The first sample was used to evaluate the data using Jöreskog and Sörbom’s (1993) Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI). Upon further investigation, the researchers found that by eliminating items, the scale could be improved. Upon evaluating the difference between the one- and two-factor models, the two-factor model prevailed. The reliability of the final IMS and EMS’s alpha levels ranged between .76 and .85 across the three samples. Both scales maintained a reliability of IMS  $r = .77$  and EMS  $r = .60$  at the 9-week internal test-retest examination (Plant & Devine, 1998).

When the investigators correlated the IMS to the EMS, they found their two measures to be independent of each other, which insinuates that these scales reflect distinct independent sources of motivation ( $r = -.14$  to  $-.15$ ). To further examine that the IMS and EMS were in fact measuring what they reported they were measuring, researchers examined the correlations of these measures with other measures of prejudice, social evaluation, and self-presentation. They found that both scales showed good convergent and discriminant validity. The IMS was strongly related to prejudicial attitudes. The EMS had a small to moderate relationship with prejudicial attitudes. The IMS was not related to measures of evaluation or self-presentation, as might be expected since this scale measures motivation to respond without prejudice due to internalized low prejudice beliefs. The EMS was related to social evaluation but not the self-presentation measure, which suggests that this scale measures something beyond prejudice or social anxiety (see Table 3; Plant and Devine, 1998).

The final phase of their study was conducted in an attempt to measure the scale's predictive validity. They attempted this feat by measuring individuals' affect upon failure to meet standards imposed by self or others (Plant & Devine, 1998). Higgins (1987) self-discrepancy theory posited that discrepancies between people's responses and self-implemented standard would create feelings of guilt, uneasiness, and self-contempt. Individuals', who were externally motivated, meaning their standards were enforced by others, would experience feelings of fear and threat (Higgins, 1987). As predicted, individuals with large discrepancies between their responses and self-imposed standards displayed feelings of guilt and self-criticism. Those who were externally motivated,

particularly those who were highly externally motivated to respond without prejudice, admitted feelings of threat (Plant & Devine, 1998).

To further evaluate predictive validity of these scales, the researchers had individuals report their personal beliefs about stereotypes either privately or anonymously. The researchers hypothesized that individuals who were externally motivated to respond without prejudice, due to possible social concerns, would adapt their answers when forced to relay their answers publicly in front of others who were believed to be non-prejudicial. The researchers' findings confirmed their assumption and displayed strong behavioral evidence of the predictive validity of the two scales by witnessing the individuals, who were primarily externally motivated, adjust their responses of prejudice in the face of social pressure. The cumulative evidence across the studies sustained Plant and Devine's assumption that their scales, IMS and EMS, displayed good validity and reliability as a research tool (Plant & Devine, 1998).

#### Procedure

A list was purchased that offered approximately 11,500 South Carolina 6th – 12th grade teachers' email addresses. The list was used to send out an e-mail invitation to participants with information regarding the study. The e-mail invitation contained information about the purpose of the study, security measures utilized, risks involved, required implied consent, compensation if they decided to participate and the link to begin the study (Appendix K).

The e-mails were sent from the survey company, Checkbox Survey Solutions, which was able to code a subject identification number for each individual recipient. When the participant clicked on the link provided in the e-mail invitation, it sent them to

the first part of the survey, which included the demographic information. Upon completing the demographic information they were automatically redirected to another company, Inquisit by Millisecond Software, which had the capacity to measure latency time, required for the Implicit Association Test. Inquisit had the ability to link the subject identification numbers from the first company's survey containing the demographic data, so that the information could be connected. The data from each individual participant from both of the companies had the same subject identification number. Upon completing the IAT, the subjects were automatically redirected to the last portion of the study that contained the MHS, IMS, EMS and additional questions pertaining to their school. This information was connected with the first portion, the demographic information from Checkbox Survey Solutions, by the individuals' e-mail address. All three portions were able to be connected to each other by the participants' subject identification number and their e-mail address.

The first week of surveying included a \$10 Amazon.com gift certificate for everyone who participated. Due to a lack of participation a reconfiguration of the study took place during the second week in which the individuals could be placed into a drawing for a \$500 gift certificate. All participants from the first week of surveying who completed all portions of the study were added into the drawing for the \$500. During the second week, only those who added their e-mail addresses to the study in the predefined location were added to the drawing. The compensation was supplied by the researcher.

Another change that took place from week one to week two was the participants' ability to be completely anonymous. The questionnaires and task were reconfigured so that all parts of the questionnaires, including the demographic information, were

completed at the beginning in the same session and it ended with the participants being redirected to the task, making it possible for the individuals to be completely anonymous because subject identification numbers were the only identifiable indicator. If the individuals were interested in the \$10 Amazon.com gift certificate and/or the \$500 drawing or desired a copy of the completed study they inserted their e-mail address into a pre-located area in the study. Due to the real-time tracking ability of Checkbox Survey Solutions, I was able to visually watch how many people had completed the survey and from which e-mail address, so that the compensation could be sent within 24 hours of their completion with a thank you message (Appendix L). The survey was available for a time period of two weeks at which point it was inactivated so the data could be collected.

#### Response Rate

Average response rates for web-based or e-mail based surveys are varied in large part because of all the confounding variables that can negatively impact people's desire to participate. Cook, Heath, and Thompson (2000) found, after analyzing 68 studies, that electronic-based surveys had an average response rate of between 35% and 40% depending on whether they included studies with missing data in the calculation. They compared their response rates over several predictor variables, two of which are pertinent to this study, those being sensitive topics and studies measuring attitudes. Sensitive topics showed a Pearson product-moment correlation coefficient of  $-.132$  and studies measuring attitudes only showed a correlation coefficient of  $.1$ . In order to get a proportion of explained variance you would square the correlation coefficient and multiply it by 100 to get the percentage. Calculating the two predictor variables of topic sensitivity and the measurement of attitude only accounted for 2.7% of the variance. Fricker and Schonlau

(2002) assessed response rates of 9 e-mail based surveys. The average of these e-mail surveys was calculated to 33% with a low of 6% and a high of 68%.

Sheehan (2001) conducted a meta-analysis of 31 studies from the time period of 1986 to 2000 and found an average response rate, specifically for e-mail based surveys, to be approximately 37%. Sheehan (2001) noted that more recently conducted survey response rates appeared to be decreasing, which considering this study took place a decade ago, if the trend continued would cause the 37% to be lower at this time. One of the reasons that it is believed that electronic-based survey response rates are decreasing is due to the large number of surveys individuals are exposed to on a daily basis (Sheehan, 2001). A number of researchers have identified multiple variables that could account for lower response rates, which may have impacted this study's response rate and included the topic being socially sensitive, the length of the survey, not sending a pre-introduction e-mail, and the individual's attitudes being one of the main concentrations (Cook, et al., 2000; Fricker & Schonlau, 2002; Sheehan, 2001).

At the beginning of the study the compensation included a \$10 Amazon.com gift card that was e-mailed to the recipient within 24 hours of completing the study. The gift card could be redeemed instantly through a link provided in the e-mail. After the first week only thirty-seven individuals had filled out the survey, some of which had missing information, but was counted because all scales were included. These scales were the Modern Homonegativity Scale, the Internal and External Motivation to Respond without Prejudices, and the Implicit Association Test. Neither the demographic information nor the 8 additional questions about their school environment had to be completed to be counted in the total. Thirty-seven participants is 0.3% of 11,500, 11,500 being the total

number of e-mails sent. Resistance to discuss the topic of homosexuality was evident so in an attempt to increase the response rate the researcher added a drawing in which a recipient would be picked at random at the end of the survey to receive a \$500 gift certificate. This \$500 gift certificate was in addition to the \$10 Amazon.com gift certificate that all participants received. The only requirement to be entered into the \$500 drawing was to complete all parts of the survey.

Part of this reconfiguration also entailed removing the Modern Homonegativity Scale – Lesbian. This decreased the number of questions that needed to be answered by 12. When I tested the correlation between Modern Homonegativity Scale – Lesbian and Modern Homonegativity Scale – Gay it was found that it possessed an extremely high correlation ( $r = .974, p < .0001$ ). As such, using only one measure of Modern Homonegativity Scale, in this case the Modern Homonegativity Scale – Gay, provided sufficient information to compare the explicit scale to other variables within the study. The new configuration did however result in the loss to distinguish if there is a significant difference in the rate of homonegativity in regard to participants' attitude toward gay or lesbian individuals.

This reconfigured survey, which was sent out as a reminder in a second e-mail, had a total of 57 recipients who completed all the scales. The 37 participants from the first e-mail and the 57 recipients from the second e-mail gave a total of 94. The total number of ninety-four participants equaled a response rate of 0.8%. To help explain possible reasons for the low response rate, further investigation ensued.

Tourangeau, Groves, and Redline (2010) found that when a topic created social desirability issues, when the individual may be embarrassed by their answers or believed

their answers would be in a socially undesirable category, the individuals were less likely to respond. Groves et al. (2006) reported that response rates are not subject to influence by topic interest or an individuals' self-image alone, but more so if the topic being studied triggered thoughts that were rewarding. They explained the rewards as being, "pleasant memories, psychic benefits of demonstrating knowledge in an area one considers important, or the gratification of knowing that the survey may increase society's attention to an issue related to key self-interest" (Groves et al., 2006, p. 734). On the other end of the spectrum, when the topic generates negative thoughts, even if the topic is considered personally relevant, it may suppress participation (Groves et al., 2006). Individuals who have negative feelings or attitudes about homosexuality, hypothetically, may avoid participating in this study due to it generating negative thoughts.

Minsuk, Robert, Eunjae, Stephen and Kenneth (1999) studied survey response rates specific to the population of teachers. One finding suggested that teachers whose schools were apt to be targeted for reform efforts, for example high poverty or large schools, showed a trend toward lower response rates. Hypothetically, if teachers believed that outsiders would attempt to reform the environment of their school for the LGB youth, they may decide not to participate in the survey. The reasons for low response rates for any particular survey are numerous and far reaching.

### Statistical Analysis

In this research study SPSS was utilized to analyze the data and for performing statistical analysis. In this study a number of different statistical tests were utilized. Chapter 4 will discuss these tests and provide the results from the analyses.



## CHAPTER 4

## Results

The purpose of this research endeavor was to ascertain information about the support system available for sexual minority youth in South Carolina Middle and High Schools through evaluating teachers' attitudes toward homosexuality and resources currently available in these teachers' schools for sexual minority youth. The following is an analysis of the data that was gathered over a two week period through voluntary participation in an internet-based survey. Information about the sample, analysis of the data and answers to the proposed hypotheses are addressed.

*Demographic Information*

The respondents completed information that evaluated eight socio-demographic characteristics, which included gender, age, sexual orientation, ethnicity/race, as well as the participants' education level, frequency of religious service attendance, political outlook, and political affiliation. Seventy-five individuals completed the demographic information. The findings for the demographic information are reported in Table 1. Within this study, 78.7% (n = 59) identified as female, 21.3% (n = 16) as male and 0 as transgender. In relation to age, 62.7% identified themselves as between the ages of 31 – 50. The majority of the participants, 90.7% (n = 68) identified as heterosexual and 9.3% (n = 7) as non-heterosexual. In regard to ethnicity/race, 82.7% (n = 62) acknowledged being Caucasian, 14.7% (n = 11) African American, 1.3% (n = 1) Latino, and 1.3% (n=1) other. The largest portion of participants 70.6% (n = 48) attended religious services at least once a month, 60% attending more than once a month. Further discussion about educational level, political outlook and political affiliation of the participants is below.

TABLE 1. Demographics (n = 75)

Category	f	%
<b>Gender</b>		
Female	59	78.7
Male	16	21.3
Transgender	0	0
<b>Age</b>		
21 – 30	6	8
31 – 40	23	30.7
41 – 50	24	32
51 – 60	15	20
60 <	7	9.3
<b>Sexual Orientation</b>		
Heterosexual	68	90
Homosexual	3	4
Bisexual	3	4
Unsure/Questioning	1	1.3
<b>Ethnicity/Race</b>		
African American	11	14.7
Caucasian	62	82.7
Latino	1	1.3
Other	1	1.3
<b>Education Level</b>		
Bachelors	14	18.7
Masters	58	74.7
Doctorate	5	6.7
<b>Frequency of Religious Service Attendance</b>		
Never	10	14.7
Holidays Mainly	10	14.7
Once a Month	7	10.3
Several Times a Month	18	26.5
Several Times a Week	23	33.8
<b>Political Outlook</b>		
Very Liberal	8	10.7
Moderately Liberal	14	18.7
Slightly Liberal	10	13.3
Neither Liberal or Conservative	12	16
Slightly Conservative	15	20

TABLE 1. Continued

Category	f	%
Political Outlook (continued)		
Moderately Conservative	10	13.3
Very Conservative	6	8
Political Affiliation		
Strongly Democratic	12	16
Moderately Democratic	13	17.3
Slightly Democratic	4	5.3
Neither Democratic or Republican	26	34.7
Slightly Republican	6	8
Moderately Republican	7	9.3
Strongly Republican	7	9.3

One of the limitations of this study, due to its voluntary nature, is that the sample is not representative of the general population's demographics or the current teacher demographics in South Carolina. Political outlook, political affiliation, and percentage of teachers with advanced degrees all showed a deviation from the norm. Individuals who identified as less homophobic or less heterosexist show more willingness to participate in a study of this type (Tourangeau, et al., 2010; Groves, et al., 2006). So it was not surprising when this study showed higher rates of individuals who identify as liberal, democrat and/or individuals possessing higher educational levels, all of which have showed from past research to have lower rates of homophobia or homonegativity, than the South Carolina general population or South Carolina's teacher population (Batcheler, 2009; Herek, 1988, 1994, 1998; Whitley & Lee, 2000).

According to South Carolina's State Department of Education, on average only 60% of teachers hold advanced degrees, that being masters or doctorate level degrees. This 60% was obtained by averaging the middle school "Fact File report card's" teachers with advanced degrees with the high school "Fact File report card's" teachers with advanced degrees (South Carolina State Department of Education, 2011). The percentage of teachers with advanced degrees in this study was 81.4%, showing 20 percentage points difference from the norm (see Figure 1). As can be seen in Figure 2, in regard to political outlook, in the current study 42.7% identified as liberal with Gallup Polls from 2011 identifying only 18% of South Carolinians leaning toward a liberal outlook, showing a 24.7% spread between the two. According to the Gallup Poll, South Carolina ranks 9<sup>th</sup> in the nation for the highest rate of conservatives within the state, the Gallup Poll and this study showing similar rates of 41% (Jones, 2011). The Gallup Poll identified South

Carolina as 12<sup>th</sup> in the nation for the highest rate of Republicans. This study showed a 20 percentage point decrease from the norm, as identified by the Gallup Poll, in regard to the percentage of individuals who identified as Republican (Current study: 26.6%; Gallup Poll: 47%) (Jones, 2012) (See Figure 3).

Figure 1. This graph compares the difference between the current study’s advanced teacher degree statistics and that of South Carolina’s 2011 advanced teacher degree statistics from middle and high school teachers.

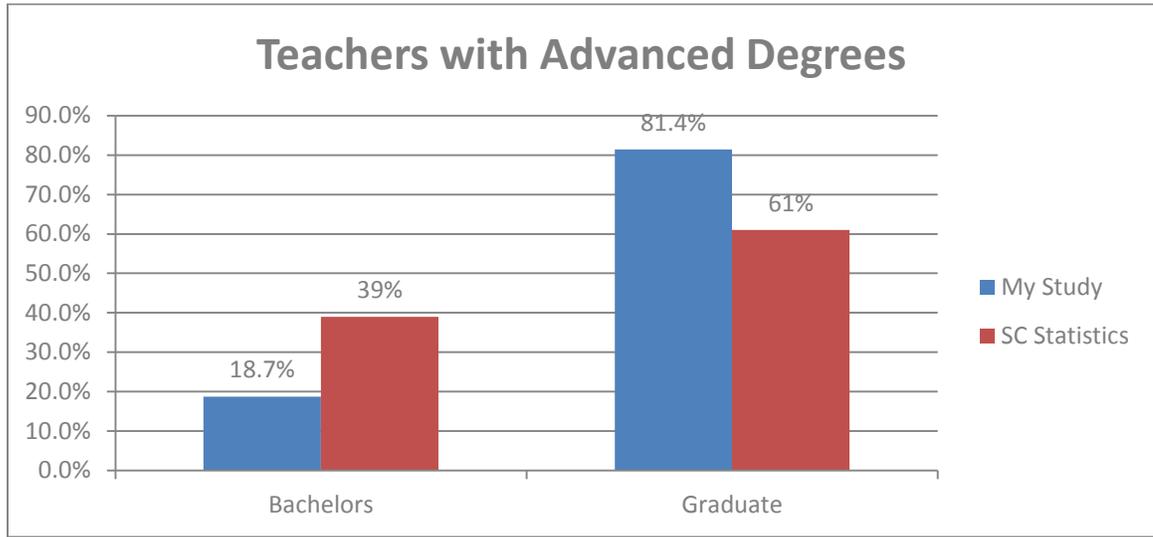


Figure 2. This graph compares the difference between the current study’s political outlook statistics and that of South Carolina’s political outlook statistics from 2011 Gallup poll survey.

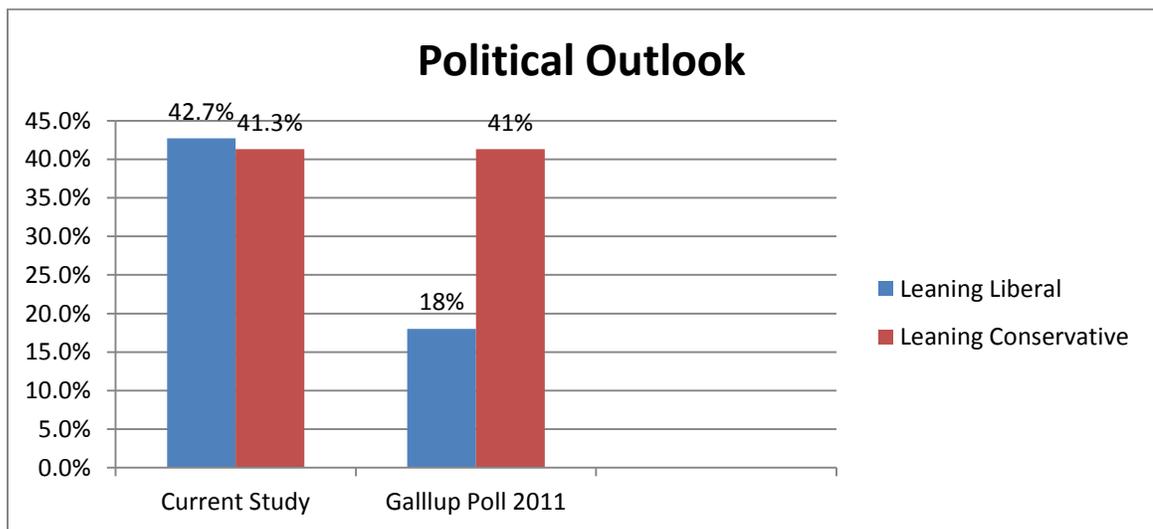
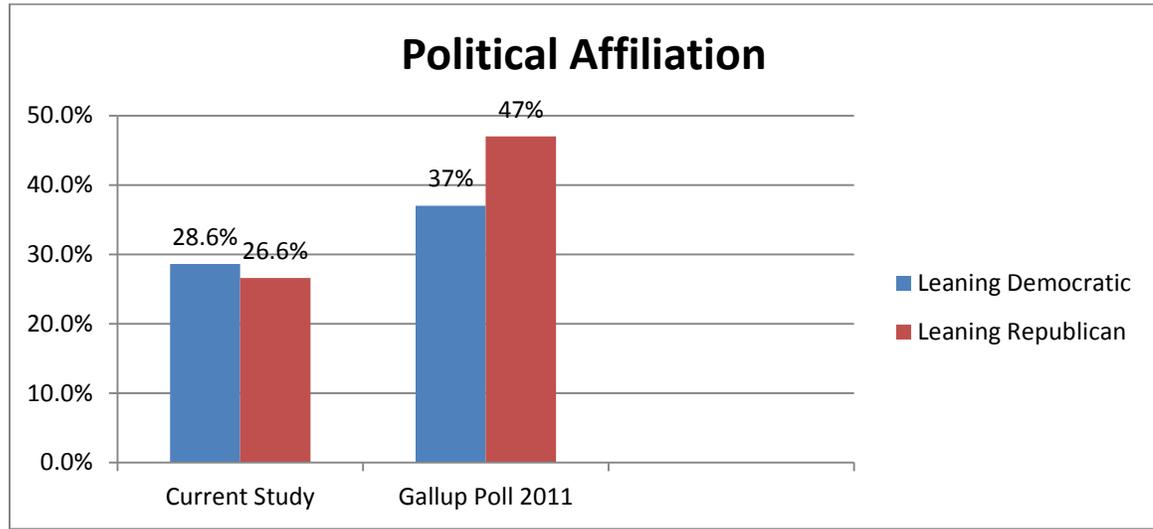


Figure 3. This graph compares the difference between the current study's political affiliation statistics and that of South Carolina's political affiliation statistics from 2011 Gallup poll survey.



Regardless of the small and likely biased sample, data were analyzed according to plan. For the purpose of this dissertation all statistical procedures were carried out but only tentative conclusions can be drawn from these results. The analysis will follow the study hypotheses, and each will be discussed and analyzed separately.

### *Hypothesis One*

In order to test the first hypothesis regarding the relationship between the Implicit Association Test (IAT) and the Modern Homonegativity Scale (MHS), I conducted a bivariate Pearson Product Moment Correlation. The results for the Modern Homonegativity Scale – Gay were not significant ( $r = -.159$ ,  $p = .125$ ), which would necessitate not rejecting the null hypothesis. The results for the Modern Homonegativity Scale – Lesbian did indicate a strong negative correlation at a level that was significant ( $r = -.34$ ,  $p = .05$ ), which would entail rejecting the null hypothesis in favor of the alternative hypothesis.

The IAT d-scores are interpreted by positive numbers representing an affirming attitude toward target A (heterosexuals) and attribute A (words associated with good). A score of 0 would indicate a neutral stance between target A (heterosexuals) and target B (homosexuals). A negative d-score would indicate that the recipient associated target B (homosexuals) and attribute A (words associated with good). In regard to MHS, the higher the number the less homonegative an individual, just as the lower the number the more homonegative an individual. The correlation between the IAT and MHS – Lesbian is negative, which means they are inversely related. Another way to report this is that the more an individual associates homosexuality to the positive attribute in the IAT, the more likely he/she will show low rates of homonegativity. In the first stage of the data

collection, respondents were asked to answer both MHS – Lesbian and MHS – Gay. Thirty-two people answered both the MHS – Lesbian and MHS – Gay. As indicated in the Methods section, the two variables would be and are strongly and significantly correlated ( $r = .974, p < .001$ ).

### *Hypothesis Two*

To test the hypothesis of whether the intensity of secondary school teachers' explicit and implicit attitudes toward homosexuality was affected by the degree of motivation (internal or external) to respond without prejudice, I conducted a bivariate Pearson Product Moment Correlation. The correlation between the Internal Motivation to Respond without Prejudice (IMS) and the External Motivation to Respond without Prejudice (EMS) is small and insignificant ( $r = -.148, p > .05$ ), as expected. This study was unable to analyze the data using ANOVA due to the limited sample size and distribution of sample, as is done in most other research studies that use the scale of IMS and EMS. The analysis of the EMS against the dependent variables of this study did not produce a significant effect, which would call for not rejecting the null hypothesis. The analysis of the IMS against the dependent variables of this study produced a significant effect for the MHS – L ( $r = .52, p < .01$ ) and MHS – G ( $r = .60, p < .001$ ), which would involve rejecting the null hypothesis in favor of the alternative hypothesis. It was found that as the MHS increased so did the IMS, which means that the less homonegative an individual is the more likely they are internally motivated to respond without prejudice (see Table 2).

TABLE 2.

Correlations between the dependent variables using the bivariate Pearson Product

Moment Correlation

Category	IAT	MHS - L	MHS-G	EMS	IMS
IAT	–	-0.34	–	–	–
MHS - L	-0.34	–	.97**	–	.52*
MHS - G	–	.97**	–	–	.57**
EMS	–	–	–	–	–
IMS	–	.52*	.57**	–	–

Note:  $p < .05$ , \* $p < .01$ , \*\* $p < .001$

*Hypothesis Three*

Prior to evaluating the current study's data against GLSEN (2005) research, one issue needs to be highlighted. There is a seven year difference between when this study took place, 2012, and when GLSEN's (2005) research was undertaken. LGBT individuals and their allies have made great strides and accomplished much in the past years, which will be discussed below in Chapter 5 (Harris Interactive & GLSEN, 2005).

The following compares and contrasts the percentage of each category included in the eight questions taken from the GLSEN (2005) research in regard to teachers. If there are 10% points or more difference, it is considered, for this research endeavor, significant. A copy of the questions that were extracted from the GLSEN sponsored study called "From Teasing to Torment: School Climate in America – A National Report on School Bullying" can be found in Appendix I (Harris Interactive & GLSEN, 2005).

TABLE 3. Demographics (n = 80)

Category	GLSEN (2005) %	Study (2012) %
Teachers who know an LGB individual	89	85
Teachers who know a LGB student	37	34
Teachers who know a LGB co-worker	48	26
Teachers who identify as LGB	9	6
Teachers who believe LGB teens are safe	74	79
Teachers who believe LGB teens are NOT safe	26	24
Teachers who believe male teens who acted feminine are safe	73	69
Teachers who believe male teens who acted feminine are NOT safe	27	30
Teachers who believe female teens who acted masculine are safe	91	86
Teachers who believe female teens who acted masculine are NOT safe	9	14

In regard to questions one through three, the only category that showed significance was the number of teachers who were aware they had LGB co-workers (GLSEN: 48%; Current Study: 26%), which would call for rejecting the null hypothesis in favor of the alternative hypothesis. Questions four through seven asked the teachers about their perception of safety of the following types of students within their school: gay, lesbian, males who acted feminine and females who acted masculine. GLSEN sponsored research from 2005 and the current research rates were similar, which would encompass not rejecting the null hypothesis. It is speculated that South Carolina could be approximately 7 years behind the national average in protecting their minority identified students (Harris Interactive & GLSEN, 2005).

Teachers were asked in question eight their rate of agreement ranging from 1 (*strongly agree*) to 5 (*strongly disagree*) to the following statement: “Teachers and other school personnel have an obligation to ensure a safe and supportive learning environment for gay, lesbian, and bisexual students.” Eighty-two percent of teachers in this study strongly agreed with the above statement. The GLSEN (2005) sponsored study showed 7 years ago that nationally only 73% of teachers strongly endorsed support, which would necessitate rejecting the null hypothesis in favor of the alternative hypothesis. There was a 10 percentage point difference in South Carolina’s desire to keep these children safe, with the national statistics from past years showing fewer individuals willing to do the same. Two percent of South Carolina teachers disagreed that teachers had an obligation to ensure a safe and supportive learning environment for sexual minorities and the GLSEN sponsored study showed that nationally 9% of teachers disagreed (Harris Interactive & GLSEN, 2005).

TABLE 4. Demographics (n = 80)

Category	Yes 2005/2012 %	No 2005/2012 %	I don't know 2005/2012 %
<b>DOES YOUR SCHOOL HAVE OR HAVE YOU PARTICIPATED IN ANY OF THE FOLLOWING?</b>			
GSA (Gay/straight Alliance)	22/6	60/90	19/4
Anti-harassment and/or Anti-discrimination policy	91/85	3/3	6/12
Anti-harassment and/or Anti-discrimination policy Specific for sexual orientation	56/20	21/40	23/39
Teacher Sensitivity Training	15	83	3

In questions nine through twelve, teachers were asked about resources that were present in their schools, which had the potential to protect sexual minorities such as GSA type clubs, anti-harassment policies and/or anti-discrimination policies in general and specific to sexual orientation. The rates of anti-harassment and/or anti-discrimination policies in general are in close proximity, which would involve not rejecting the null hypothesis. SC fell 6 percentage points behind national statistics that are 7 years old (Harris Interactive & GLSEN, 2005). SC falls 16 percentage points behind the national average in the number of GSAs reported in this study (Gay-Straight Alliance Network, 2012). SC falls 26 percentage points behind the national average in regard to anti-harassment and anti-discrimination policies that specifically specifies sexual orientation as a group that needs protecting, which would call for rejecting the null hypothesis in favor of the alternative hypothesis (Harris Interactive & GLSEN, 2005). Question twelve asked whether the teachers have had teacher sensitivity training specific for sexual minorities. This information does not have national statistics to compare and contrast, but it does give useful information about the progress that South Carolina has made in helping to educate their teachers. Fifteen percent of teachers reported that they have had teacher sensitivity training specific to sexual minorities, 83% have never had such training and 3% are not sure if they have had such training.

TABLE 5. Demographics (n = 80)

Category	Extremely/ Very Helpful	Helpful/ Somewhat Helpful	Not Helpful
	2005/2012 %	2005/2012 %	2005/2012 %
<b>HOW HELPFUL WOULD THE FOLLOWING EFFORT BE IN CREATING SAFER SCHOOLS FOR LESBIAN, GAY, AND BISEXUAL STUDENTS?</b>			
Teacher Sensitivity Training	37/60	49/32	15/9
Anti-harassment Policies	46/63	47/33	11/4
GSA Clubs	29/22	46/38	26/20
Supportive Principal/ Superintendent that addressed Safety issues	37/47	47/33	16/8

Question thirteen through sixteen asked the teachers how helpful they believed teacher sensitivity training, anti-harassment policies, GSA clubs and/or supportive principal/superintendent that addressed safety issues would be in creating safer schools for lesbian, gay and bisexual students. Other than having GSA clubs present in the school, this demographic of teachers overwhelmingly believed all these resources would be helpful in establishing a safer atmosphere for sexual minorities. The largest discrepancy comes in regard to teacher sensitivity training, 60% of SC teachers reporting such would be extremely helpful and very helpful as opposed to the national average of 37%, showing a 23% discrepancy, which would entail rejecting the null hypothesis in favor of the alternative hypothesis (Harris Interactive & GLSEN, 2005).

#### *Hypothesis Four*

In order to test my fourth hypothesis regarding the relationship between the dependent variables of the IAT, MHS – G, MHS – L, IMS and the EMS and independent variables, I used a number of different analysis tools. When assessing the independent variables of sexual orientation, gender, race, race/ethnicity, education level of the teachers, and questions 9 through 12 on the questionnaire, I compared the means using the Independent Sample T-test to analyze the data. When assessing the independent variables of age, frequency of religious service attendance, political outlook, political affiliation, questions 1 through 9 and questions 13 through 16, I used bivariate Pearson Product Moment Correlation.

#### *Gender*

Independent samples T-tests were conducted to determine whether women or men differ in their levels of homonegativity. There was a statistically significant difference

regarding the MHS – G, which showed that women ( $M = 3.44$ ) had a lower degree of homonegativity compared to men ( $M = 2.79$ ) ( $t = -2.28, p < .05$ ), which would encompass rejecting the null hypothesis in favor of the alternative hypothesis. The IAT, which is the implicit attitude test, revealed the opposite of what the MHS – G found, in that men ( $M = 0.17$ ) showed more of a positive regard for homosexuals in comparison to women ( $M = 0.43$ ), ( $t = -2.02, p < .05$ ), which would call for rejecting the null hypothesis in favor of the alternative hypothesis. The dependent variables that did not show a significant difference to gender were the IMS and EMS, which would involve not rejecting the null hypothesis. The MHS – L did show a statistically significant difference revealing the same trend as the MHS – G, but due to the limited sample size was not included in the results.

#### *Race/Ethnicity*

In order to identify if there were a significant difference in race and the dependent variables, I categorized the race variable into two groups, the first group being Caucasian and the second group representing minorities. There was not a significant effect size found for any of the dependent variables measured against race/ethnicity, which would require not rejecting the null hypothesis.

#### *Sexual Orientation*

The results indicate that there are significant correlations between the independent variable of sexual orientation and the dependent variables of MHS – G and the IMS, both of which would necessitate rejecting the null hypothesis in favor of the alternative hypothesis. On the MHS – G, non-heterosexuals had a mean of 4.10 as compared to a mean of 3.17 for heterosexuals ( $t = -2.40, p < .05$ ). There was also a significant difference

between the means of non-heterosexuals ( $M = 8.69$ ) and heterosexuals ( $M = 7.07$ ) ( $t = -2.45$ ,  $p < .05$ ) in regard to the IMS showing that non-heterosexuals were more internally motivated to respond without prejudice, which would call for rejecting the null hypothesis in favor of the alternative hypothesis. It is important to note that the sample size of non-heterosexuals was 7, 14% of the sample, and it should be viewed cautiously. There was no statistical difference between heterosexuals and non-heterosexuals mean in the dependent variable of the IAT and EMS, which would require not rejecting the null hypothesis.

#### *Age*

The bivariate Pearson Product Moment Correlation was used to analyze age against the dependent variables of this study. This analysis did not identify a correlation between any of the dependent variables, in regard to age, which would not require rejecting the null hypothesis. It did, however, show a trend toward such in the EMS ( $r = -.23$ ,  $p = .09$ ). These variables were negatively correlated, which means as the age increased, the EMS decreased showing higher rates of being externally motivated to respond without prejudice.

#### *Education Level of Teachers*

Education was divided into two groups, teachers who had obtained their bachelor's degree and teachers that had attained their graduate degree (Master's or Doctorate). Using the Independent Sample T-test it was found that there was not a significant difference between the education level of teachers and the dependent variables of the IAT, MHS – L, MHS – G, IMS or EMS, which would necessitate not rejecting the null hypothesis.

*Frequency of Religious Service Attendance*

Frequency of religious service attendance was analyzed for significant correlations with the dependent variables by using the bivariate Pearson Product Moment Correlation. This analysis showed a significant effect for the MHS – L ( $r = -.65, p < .001$ ) and the MHS – G ( $r = -.50, p < .001$ ), which would require rejecting the null hypothesis in favor of the alternative hypothesis. The more church an individual attends, the lower the MHS score, reflecting more homonegativity. IAT, IMS and EMS did not show a meaningful effect size when correlated with the frequency of religious service attendance, which would involve not rejecting the null hypothesis.

*Political Outlook*

Political outlook was significantly correlated with a number of dependent variables in this study which included the MHS – L, MHS – G, and IMS, which would call for rejecting the null hypothesis in favor of the alternative hypothesis. The MHS – L ( $r = .69, p < .001$ ) and MHS – G ( $r = .66, p < .001$ ) produced a significant effect showing that the more a teacher identified as conservative, the more homonegative were his or her scores on the MHS. Internal Motivation to Respond without Prejudice was also found to be significant ( $r = .37, p = .01$ ), showing that teachers with less internal motivation identified as more conservative. There was not a significant effect between the IAT and the EMS in regard to political outlook, which would encompass not rejecting the null hypothesis.

*Political Affiliation*

The Bivariate Pearson Product Moment Correlation was used to identify whether political affiliation showed a significant effect between the dependent variables of this study. The MHS – L, MHS – G and IMS all showed a significant effect, which would necessitate rejecting the null hypothesis in favor of the alternative hypothesis. The range for political affiliation was 1 (very Republican) to 7 (strongly Democrat), so as the teachers' scores on political affiliation decreased, showing a trend toward being more Republican, their MHS score also decreased, showing teachers becoming progressively more homonegative. The significance level for MHS – L was  $r = .55$ ,  $p = .001$  and for MHS – G was  $r = .57$ ,  $p < .001$ . The significance level for IMS was  $r = .30$ ,  $p < .05$ , which showed that Republicans were less internally motivated to respond without prejudice toward gay and lesbian individuals. The IAT and EMS did not show a significant effect for political affiliation, which would call for not rejecting the null hypothesis.

*Affiliation with Gay, Lesbian and/or Bisexual Individuals*

To evaluate whether there were any significant effects related to Questions 1-3, I added the number of the different types of sexual minorities (gay, lesbian and/or bisexual) to the different types of people (yes; yes, a co-worker; yes, a student; yes, I am) that teachers reported knowing within these 3 questions. The numbers ranged from 0 to 10. I used the bivariate Pearson Product Moment Correlation and found that teachers who knew more different types of sexual minorities and types of people who identified as sexual minorities, the less homonegative were their scores and the more internally motivated they were to respond without prejudice toward gay and lesbian individuals. The statistically significant effects for MHS – G was  $r = .35$ ,  $p = .001$  and IMS was  $r =$

.25,  $p = .01$ , which would entail rejecting the null hypothesis in favor of the alternative hypothesis. The IAT showed a trend toward a significant effect  $r = -.16$ ,  $p = .09$ , but was not significant, which would call for not rejecting the null hypothesis. As the IAT increased, meaning the participants were pairing heterosexuality with attributes associated with good, the fewer LGB individuals and types of LGB individuals did the person know. The MHS – L and EMS were not found to be significant, which would require not rejecting the null hypothesis.

*Believed Safety for their Students*

Questions 4 – 7 were analyzed using the Bivariate Pearson Product Moment Correlation. For question four which asked about the safety of gay youth, the MHS – G ( $r = .23$ ,  $p = .06$ ) and IMS ( $r = .23$ ,  $p = .05$ ) showed significance, which would necessitate rejecting the null hypothesis in favor of the alternative hypothesis or a trend toward significance, which would encompass not rejecting the null hypothesis. For question five which asked about the perceived safety of lesbians only, MHS – G showed significance ( $r = .23$ ,  $p = .05$ ), which would involve rejecting the null hypothesis in favor of the alternative hypothesis. For males who act feminine, question six, MHS – G ( $r = .25$ ,  $p < .05$ ), IMS ( $r = .24$ ,  $p < .05$ ) and the EMS ( $r = -.23$ ,  $p = .05$ ) showed a significant effect, which would require rejecting the null hypothesis in favor of the alternative hypothesis. The last category was females who acted masculine and their perceived safety showed a significant effect with the MHS – G ( $r = .35$ ,  $p < .01$ ) and IMS ( $r = .25$ ,  $p < .05$ ), which would call for rejecting the null hypothesis in favor of the alternative hypothesis.

In questions 4 – 7, which included gay, lesbian, male who acted feminine, and female who acted masculine, the MHS – G showed a significant effect or a trend toward

a significant effect that suggests that the less homonegative an individual, the more unsafe they believe these four different groups of children are in their schools. The IMS, which was significant for all groups but lesbian students, showed that the more internally motivated the teacher was to respond without prejudice, the more danger she perceived these youth to be exposed to in their schools. EMS showed that the safer the teachers reported the students, the more externally motivated to respond without prejudice were the teachers. The IAT was analyzed but did not show a significant effect, which would require not rejecting the null hypothesis.

#### *Believed Obligation toward LGB Students*

Question eight asked the teachers how much they agree or disagree with the statement of “Teachers and other school personnel have an obligation to ensure a safe and supportive learning environment for gay, lesbian, and bisexual students.” MHS – G ( $r = -.40, p = .001$ ) and IMS ( $r = -.25, p < .05$ ) were found to show a significant effect, which would involve rejecting the null hypothesis in favor of the alternative hypothesis. As the scale of agree or disagree, the range being 1 (*strongly agree*) to 5 (*strongly disagree*), increases, the MHS – G decreases, or put another way, the more you disagree with the above statement, the more homonegative your MHS – G score revealed the participant to be. In regard to the IMS, the less internally motivated you are to respond without prejudice, the more you disagree with the above statement about whether LGB students should have a safe and supportive learning environment. The MHS – L, IAT, and EMS did not show a significant effect, which would entail not rejecting the null hypothesis.

#### *Resources within the School*

Questions nine through eleven asked about resources within the teacher's school that had the potential to protect the LGB youth with three different answers being available, those being "yes", "no", and "I don't know". Individuals who reported "I don't know" were disregarded for this analysis. Question nine asked about the presence of Gay/Straight Alliance (GSA) clubs or another club that addressed LGB issues in a positive way. MHS – G showed a significant difference with a "yes" mean of 4.47 (SE = 0.22) and a "no" mean being 3.43 (SE = 0.13) ( $t = 2.16, p < .05$ ), which would require rejecting the null hypothesis in favor of the alternative hypothesis. Note that individuals who answered "yes" as opposed to "no" showed a higher mean score on the MHS – G which suggests a more positive regard for LGB youth. It is important to note that only 5 individuals in the sample answered "yes" to the question of whether they had a GSA club in their schools, which is less than 8%. The low sample size should be considered in viewing these results. IAT, MHS – L, IMS and EMS did not show a significant effect, which would call for not rejecting the null hypothesis.

Question ten asked if the teachers had an anti-discrimination and/or anti-harassment policy in general, which showed no significant effect, which would involve not rejecting the null hypothesis. Question eleven asked if the teachers had an anti-discrimination and/or anti-harassment policy that specifically protects individual's sexual orientation. The MHS – G scale's mean for "yes" was 2.90 (SE = 0.29) and for "no" was 3.68 (SE = 0.18) ( $t = -2.38, p < .05$ ), which would require rejecting the null hypothesis in favor of the alternative hypothesis. The answers for question eleven suggests that in South Carolina you are considered more prejudiced if you have an anti-discrimination policy that specifically protects individual's sexual orientation. Question eleven did not

show a significant effect with the IAT, MHS – L, IMS or EMS, which would require not rejecting the null hypothesis. Question twelve, which asked about past teacher sensitivity training, showed no significant difference between the individuals who answered “yes” and those who answered “no,” which would encompass not rejecting the null hypothesis.

#### *Helpfulness of Resources for LGB Youth*

The last four questions, questions thirteen through sixteen, asked the teachers how helpful resources such as teacher sensitivity training, anti-harassment or anti-discrimination policies, allowing clubs on school campuses that promote tolerance toward sexual minorities, and/or having a principal or superintendent more openly address safety issues would be in creating safer schools for lesbian, gay, or bisexual students. The possible answers ranged from 1 (*extremely helpful*) to 5 (*not helpful*). Using the Bivariate Pearson Product Moment Correlation, there was a significant effect in regard to each question’s independent variable and the dependent variables of MHS – L, MHS – G, and IMS, which would encompass rejecting the null hypothesis in favor of the alternative hypothesis. The IAT and EMS did not show a significant effect, which would call for not rejecting the null hypothesis.

For question thirteen that asked about teacher sensitivity training, significant effects are as follows: MHS – L ( $r = -.61, p < .05$ ), MHS – G ( $r = -.55, p < .001$ ), and IMS ( $r = -.52, p < .001$ ). For question fourteen that asked about anti-harassment or anti-discrimination policies, significant effects are as follows: MHS – L ( $r = -.65, p < .05$ ), MHS – G ( $r = -.56, p < .001$ ), and IMS ( $r = -.45, p < .001$ ). For question fifteen that asked about allowing clubs on school campuses that promote tolerance toward sexual minorities, significant effects are as follows: MHS – L ( $r = -.86, p < .001$ ), MHS – G ( $r =$

-.74,  $p < .001$ ), and IMS ( $r = -.47$ ,  $p < .001$ ). For question sixteen that asked about have a principle or superintendent more openly address safety issues, significant effects are as followed: MHS – L ( $r = -.64$ ,  $p < .05$ ), MHS – G ( $r = -.57$ ,  $p < .001$ ), and IMS ( $r = -.41$ ,  $p < .001$ ). These figures suggest that the less homonegative the teachers were, as well as the more internally motivated they were to respond without prejudice, the more helpful they believed teacher sensitivity training, anti-harassment or anti-discrimination policies, allowing clubs on school campuses that promote tolerance, and/or having a principle or superintendent more openly address safety issues would be in creating safer schools for lesbian, gay, or bisexual students.

TABLE 6. Correlations that show significant difference between variables using the Independent Sample T-test

Category	IAT	MHS - L	MHS-G	EMS	IMS
Gender	-2.02	-	-2.28	-	-
Race	-	-	-	-	-
Sexual Orientation	-	-	-2.40	-	-2.45
Level of Education	-	-	-	-	-
Question Nine	-	-	2.16	-	-
Question Ten	-	-	-	-	-
Question Eleven	-	-	- 2.38	-	-
Question Twelve	-	-	-	-	-

Note: significance of .05 or below

TABLE 7. Correlations that show significant difference between variables using the Bivariate Pearson Product Moment Correlation

Category	IAT	MHS - L	MHS-G	EMS	IMS
Age	–	–	–	–	–
Frequency of Religious Service Attendance	–	-.649**	-.502**	–	–
Political Outlook	–	.694**	.663**	–	.370**
Political Affiliation	–	.552**	.568**	–	.298
Question One - Three	–	–	.350**	–	.254*
Question Four	–	–	–	–	.231
Question Five	–	–	.229	–	–
Question Six	–	–	.249	-.231	.240
Question Seven	–	–	.351*	–	.251
Question Eight	–	–	-.396**	–	-.253*
Question Thirteen	–	-.612	-.550**	–	-.523**
Question Fourteen	–	-.651	-.555**	–	-.446**
Question Fifteen	–	-.856**	-.741**	–	-.471**
Question Sixteen	–	-.641	-.567**	–	-.406**

Note: \*  $p \leq .01$ ; \*\* $p \leq .001$

*Additional Data from the Study*

This study and its results were predominately based on quantitative data gathered through the use of measures and questionnaires, but there was a section at the end that gave the participants a chance to voice their thoughts about the study or topic of homosexuality. Some participants took advantage of this section. Also, because my e-mail address as well as the dissertation chair's e-mail address were available to all who received the invitation e-mail to participate in the study, participants had another avenue to voice their thoughts and opinions. The following are the accumulation of all the comments and some of the more interesting e-mails.

*Environment of South Carolina in regard to Homosexuality*

The Hill Newspaper, based out of Washington, D. C., focuses on political and business activities. They published an article that discussed the views of Reverend Huey Mills, the head of the South Carolina Association of Christian Schools, which includes 85 schools in the area of SC. Mills is considered a prominent South Carolina Christian evangelical leader. Rev. Mills's endorsed Rick Santorum over Mitt Romney for the Republican presidential candidacy. Within the article Reverend Mills is quoted as saying, "In obedience to the Judeo-Christian Scriptures, most South Carolinians and I have a sane and healthy homophobia, while Mitt Romney has a very bad case of homophilia" (Joseph, 2012). Homophobia is defined by Webster's New World Dictionary as being an, "irrational hatred or fear of homosexuals or homosexuality" (p. 647). Pairing the words sane and healthy to homophobia is inaccurate and misleading. Though, Reverend Mills's statement has social precedence as there is an abundance of evidence that there is a positive relationship between religious fundamentalism and homophobia (Altmeyer &

Hunsberger, 1992; Fisher, Derison, Polley, Cadman, & Johnston, 1994; Kirkpatrick, 1993; Laythe et al., 2001; Lee & Whitley, 2000; Whitley, 1999; Whitley & Egisdottir, 2000).

A Gallup poll taken in 2008, rated South Carolina as number 3 in the nation for the most religious state. When asked, “Is religion an important part of your daily life?” 80% of South Carolinians answered, “Yes” (Newport, 2012). Another survey found that 63% of people identify as religious fundamentalist in the East South Central region of the United States (Barton, 2010). Research suggests that the majority of South Carolinians identify as religious fundamentalists, which supports the notion that many agree with Reverend Huey Mills’s beliefs and attitudes toward homosexuality, (Jones, 2011; Newport, 2011, 2012).

Due to the ruling of a court case in 2001, to date, religious groups have access to public schools, with the most influential, organized and funded group being the Good News Club (Stewart, 2012). As noted by Stewart (2012), “There is more religious activity in American public schools than there has been for the past 100 years”. Although the inundation of religion into the Western World is at an all-time high, a Gallup poll taken in 2011 found that 47% of Conservatives would like to see organized religion have more influence in this nation (Newport, 2011; Stewart, 2012). The Good News Club represents themselves as nondenominational with the belief that the Bible was meant to be interpreted literally (Stewart, 2012). Currently South Carolina has approximately 250 of these clubs, which are operating in its public schools and outreach facilities (Child Evangelism Fellowship of South Carolina, 2012). Although most of these Good News Clubs meet in elementary schools, the impact crosses over into the middle and high

schools of South Carolina, as is part of the clubs mission (Stewart, 2012). Since the clubs are run by volunteers, the number of clubs present in South Carolina reflects the community's support and involvement in this religious sect's mission. It is speculated that the low response rate and the following e-mails are associated with South Carolina's strong religious ties.

*Emails and Comments*

One e-mail response from a South Carolina teacher stated, "My own children attend a Christian Bible-based school where I know they will be taught the CLEAR Bible principles regarding this [homosexuality]. I agree with their school and what God's Word states very clearly 100%." (Anonymous, Personal communication, March 20<sup>th</sup>, 2012).

The researcher did receive one e-mail from a very busy teacher, who did not have time to complete the survey, but did want to comment on the topic.

E-mail Communication #1 from a teacher:

I will be unable to participate in the study. Right now, I have too much at home to do anything as complicated as think about my students who may or may not be gay.

Basically, I say this to them, "If I am not having sex with someone, sexual orientation does not matter. I am more interested in your mind than your activities outside of school."

As one of my best friends died of AIDS, I have issues about students' health and if I see them bullied, I try to protect them and help them. My friend Robert found high school a very troubling time. You are welcome to use my comments, but I

just cannot do another thing (Anonymous, Personal communication, March 12, 2012).

The sentence in the e-mail, “If I am not having sex with someone, sexual orientation does not matter,” may be misworded, considering few teachers are likely to discuss their sex life with their students. It is likely that it was to be read as, “If you are not having sex with someone, sexual orientation does not matter.” The question arises, “If the sexual minority student was actively dating and possibly having sex, as some teenagers do, would he/she still be privy to this respondent’s protection and help?” Another participant wrote:

I often feel very torn about LGBTQ issues. I have several good friends and a family member who would classify themselves as LGBTQ and love them for who they are. We often talk about how it seems like society's prejudice towards "gay people" is perpetuated by gay people in that they tend to use their sexuality as THE defining characteristic of themselves and their life. Also, I am sometimes torn about where I SHOULD stand based on religious beliefs and what the Bible says about the issue. My understanding is that the Bible says it is wrong and I believe the Bible. I also know that the Bible says to love people without judging so I try to do that, too. I was raised in a very liberal/democratic home with parents who were very pro-rights for all people so I feel like I am much more comfortable accepting people who consider themselves LGBTQ but now am also trying to reconcile the Bible's teachings on the matter with my personal opinions.

This individual openly discussed his/her dilemma in accepting sexual minorities. Many of these teachers were likely conditioned as young children in the infallibility of the Bible

and the sin of questioning authority. The mere presence of this cognitive dissonance may cause confusion, fear, and anxiety, if individuals allow the process to get that far, which as the first comment verifies, some do not.

One offered a challenge to the researcher stating, “I respond to others based on an internal gauge, my gut reaction, spirit to spirit. Do I agree with that particular life style; I don't know.... You tell me based on my response.” Without looking at the results the use of the words “life style” in respect to sexual minorities would suggest that he ascribes to the beliefs of his church, which he attends once a week. As for the results on the MHS – G he scored below the mean of 3.6 with a 3.1 suggesting more homonegativity than the average participant.

Two of the more positive comments came from teachers who identified themselves as heterosexual and reported being in the age group of 60 and above. One such participant wrote, “I feel like homosexuality does not define a person or determine a person's worth.” The second such participant wrote:

Human beings are human beings...no one had a choice to be gay or straight, mentally or physically disabled, stupid or intelligent, pretty or ugly, a sociopath or 'normal' when they were born. If so-called social misfits had had a choice about what character traits they would carry for the rest of their lives when they were born, how many would have chosen a negative path considering how they would be treated by society?

These comments are counter to what past research reports, which states that the older an individual, the more homonegative he/she scores on test measuring his/her attitude about homosexuality (Herek, 1988, 1994, 1998).

The last two comments that were supplied in this study spoke to the confusing wording of some of the questions. In regard to the IMS and EMS the statements were compound, which means it reported two different ideas and one participant spoke to the frustration or dilemma she faced in answering some of the questions:

Some of the first set of questions was worded strangely. For example, "I don't say anything negative about homosexuals because others will view me harshly." This doesn't apply to me, I don't say anything not because of what others would say, but because of my beliefs. How do you answer that question properly???

The second individual was a counselor who was not in the list of individuals supplied by the company of prospective teachers, but requested the opportunity to take the survey.

Only the counselor's comment is present in the survey, not her or his data.

It's difficult to answer some questions...like political outlook and political affiliation. Some folks consider me "very liberal". Others may say I am "moderately liberal". I truly can't decide what I am in the scheme of things. Also, does political affiliation mean which political party candidate do I usually vote for, or how do I view myself? I do not identify as Democrat or Republican, but when voting {which I always do...it's a strong belief of mine that we should vote in EVERY election}, I tend to pick more Democratic candidates than Republican. I was really not sure how to answer that question.

Notice that the counselor did not comment about the topic of homosexuality and the reality of such in his or her school.

Once the second e-mail was sent, some considering it a reminder e-mail, we began receiving e-mails from districts in South Carolina attempting to deter us from continuing the study. It is important to note that neither recipient asked us whether we were surveying their district nor did they discuss the fact that if we were not surveying districts, they have no bearing on our decisions. Other things that are pertinent to notice are the tone and authoritative stance of the letters. One of these recipients did not place his last name, credentials or position in the letter. The other individual compared this study to “junk mail.” Below are the two letters we received asking us to discontinue our research.

E-mail Communication #1 from District:

From time-to-time individuals and organizations external to our District have sought to conduct research in our district. These studies are not those conducted by the state or federal government, but research conducted as dissertations or to promote an individual or agency's program. For all unsolicited external research, the Department of Accountability, Assessment, Evaluation, and Research has prepared Research Guidelines and a Research Application. These procedures promote valid and reliable research, protect instructional time, and protect against liability. Moreover, these procedures obligate researchers to maintain professionalism, abide by all district policies, preserve confidentiality, and define the study's scope. At the conclusion of the application review process, a letter of approval or rejection will be sent to the researcher. A researcher whose study has been approved will be able to present the district's letter of approval to interested parties within our District. Anyone wishing to conduct research in [name edited]

County School District [number edited] should contact [name edited] at [(xxx) xxx-xxxx] (Anonymous, Personal communication, March 21, 2012).

E-mail Communication #2 from District:

I apologize for this bother, however several people in [name edited] County Schools, SC have reported receiving the below e-mail several times. You, Dr. Cnaan, are also referenced. If this is your student, please immediately ask him/her to cease surveying within our district. S/he has not received the proper internal approval. Being a large district, we receive several research requests weekly. Given our core mission to educate students, I strive to buffer our teachers from the bombarding requests for research and surveys.

If this is junk/spam mail of which you had no knowledge, then I hope to bring light to its occurrence. Regardless, thank you for your attention to this issue (J. M., Personal communication, March 21, 2012).

## CHAPTER FIVE

## Discussion

The purpose of this study was to evaluate teachers' attitudes toward homosexuality, both explicit and implicit, their motivation to respond without prejudices, their schools' current resources for their LGB youth population and possible ways to improve that environment. This research investigated the following questions:

- 1.) Is there a significant difference between teachers' explicit and implicit attitudes toward homosexuals?
- 2.) Is the intensity of secondary school teachers' explicit and implicit attitudes toward homosexuality affected by the degree of motivation (internal or external) or lack of motivation to respond without prejudice?
- 3.) Will South Carolina lack resources for LGBT youth or display a more negative attitude toward sexual minorities in comparison to the national average of the GLSEN (2005) study, "From Teasing to Torment: School Climate in America, a School Survey of Teachers and Students" in regard to the teachers' data.
- 4.) Does the teachers' IAT, MHS – G, MHS – L, EMS or IMS differ according to their reported sexual orientation identification, age, race/ethnicity, frequency of religious service attendance, political outlook, political affiliation, the number of LGB individuals that they know, their believed safety of gay, lesbians, male students who act feminine, and female students who act masculine in their school, teachers' believed obligation of providing a safe and supportive environment for LGB youth, the presence of anti-harassment policies in their schools for all youth and ones specific for LGB youth, past sensitivity

training, the presence of Gay/Straight Alliance or other supportive student clubs for LGB individuals in their school, teachers beliefs in helpfulness of teacher sensitivity training, anti-harassment and anti-discrimination policies, GSA and principle or superintendent openly addressing safety issues.

#### *Implicit Association Test*

The Implicit Association Test was thought to be an important component to incorporate into this study due to its resistance to be manipulated by individual's self-presentational efforts in regard to socially sensitive topics (Dovidio, et al., 2002; Dovidio, et al., 1997; Fazio et al., 1995; McConnell & Leibold, 2001). It shows a significant effect with the MHS – L, which is discussed below in the section titled "Independent Variables." The only other variable that was established to show a significant effect was gender. It was found that men's mean were closer to neutral on the IAT than women's, whose means were more associated with heterosexuality and the attribute of good. Men displaying a more positive attitude toward homosexuals is incongruent with what research reports. Usually men and women exhibited similar scores on the IAT in regard to homosexuality (Banse, Seise & Zerbes, 2001; Dasgupta & Rivera, 2006; Steffens & Buchner, 2003).

#### *Modern Homonegativity Scale – Lesbian*

The Modern Homonegativity Scale – Lesbian was administered during the first week of surveying. It was removed in the second week in an attempt to foster greater participation from the sample by shortening the cumulative length of the survey. Due to this alteration, just a little over 30 individuals completed this scale. Smaller sample sizes increase the difficulty in finding statistically significant associations between variables,

but even with that limitation, the MHS – L was able find significant effects with the independent variables of frequency of religious service attendance, political outlook, political affiliation, and teachers' believed helpfulness of resources that mitigate a more supportive environment for sexual minorities. It also showed significant effects for the independent variables of the IAT, MHS – G and IMS, which is discussed below.

In this study, the more an individual attended church the higher degree of homonegativity the person reported. Research supports that the more religious an individual, especially in regard to religious fundamentalist, the more negative their attitudes are toward sexual minorities (Herek, 1987; Negy & Eisenman, 2005; Rosik, Griffith, & Cruz, 2007). This study showed that the more republican and the more conservative a person identified, the more negative their regard was toward sexual minorities, which is consistent with most previous research on such topics (Herek, 2002; Barth & Parry, 2009; Haslam & Levy, 2006).

The last four independent variables that showed statistically significant correlation included teachers' beliefs about the benefits of teacher sensitivity training, anti-harassment policies, GSA clubs and the like, and having the school's principal and/or superintendent openly addressing safety issues that would be helpful in an effort to create safer schools for lesbian, gay, and bisexual students. Teachers who already have a better understanding and a more positive regard for sexual minorities are the individuals who had higher rates of agreement to the benefits of anti-harassment policies, GSA clubs, and school principal and/or superintendent openly addressing safety issues creating a more cohesive and nontoxic environment for sexual minorities. Teachers who are more homonegative have less of a desire to support or participate in such an effort. No current

research exists to which to compare these results, in regard to these specific questions against an explicit scale measuring homonegativity or homophobia of teachers. What this information does help to highlight is that there is a possibility that states that do not believe sexual minorities are in danger or refuse to address safety issues pertaining to sexual minorities may be holding negative bias about this minority population and outside mandates may need to be considered to help mitigate a healthy environment for these youth.

*Modern Homonegativity Scale – Gay*

The Modern Homonegativity Scale – Gay had the greatest number of independent variables that showed a significant association; all but five variables. The directionality of the MHS – G was the same as the MHS – L in regard to the statistically significant effects for frequency of religious service attendance, political outlook, political affiliation, and teachers’ believed helpfulness of certain resources to help mitigate a more supportive environment for sexual minorities and as such comparative research was discussed in Chapter 5 under the section MHS – L. It also showed significant effects for the independent variables of the MHS – L and IMS, which is discussed in the Independent Variable section below.

In regard to gender, it was found that female teachers had less homonegativity than male teachers. This finding is consistent with most research in that men hold a more negative attitude toward individuals who identify as homosexual than women (Herek & Capitano, 1996; Hinrichs & Rosenberg, 2002; Kite & Whitley 1996). A national study “From Teasing to Torment: School Climate in America” based on polling from more than 3,000 middle and high school students and over 1,000 secondary school teachers found

that “having a harassment policy in place that specifically mentions sexual orientation or gender identity/expression is associated with more students feeling safe (95% vs. 83%) and reporting less harassment or fewer negative remarks at their school” (p. 56).

Interestingly enough, this same national report found that, for the most part, teachers were unable to endorse, witness or admit the same benefits that the youth experienced from the anti-harassment policies that specified protection for sexual minorities (Harris Interactive & GLSEN, 2005). A surprising statistically significant association in this study was that teachers who reported the presence of anti-discrimination policies that specified sexual orientation showed higher rates of homonegativity. With the information at hand, it is important to note that the anti-harassment policies that specify sexual orientation as a protected category does not seem to be for the benefit of the teachers as much as for the students. There is also the possibility that there was an implementation problem, which caused resentment from the teachers, increasing their homonegativity. An alternative explanation is that school administrators implemented this policy in areas of South Carolina with the highest disdain for sexual minorities due to the rate of discrimination and harassment for this population. The presence of a Gay-Straight Alliance mitigated a statistically significant difference in the MHS – G showing that teachers with GSA in the schools reported less homonegativity, which is in line with the research (Harris Interactive & GLSEN, 2005).

Two other independent variables that show similar statistically significant correlations within the research and with the MHS – G in this study were sexual orientation and knowing more different types of sexual minorities (gay, lesbian, and/or bisexual) as well as knowing ones in different categories such as student, co-worker, self,

or other. Teachers who reported being non-heterosexual showed less homonegativity than their heterosexual counterparts, which is consistent with past research (Banse, et al., 2001; Cochran, et al., 2007). Teachers who knew more types of sexual minorities as well as ones in more different categories showed a more positive attitude toward non-heterosexuals. It is widely known that personal contact and interpersonal interactions reduce homophobia, which may account for the results of this study (Finlay & Walther, 2003; Herek, 1988, 2000, 2002; Hoffmann & Bakken, 2001; Landen & Innala, 2002; Lewis, 2003; Plugge-Goust & Stickland, 2001).

Although there is no research to date that we can use to compare and contrast the GLSEN (2005) sponsored report with explicit or implicit homonegativity scales, this information still has the potential to highlight some of the realities of life for sexual minorities in South Carolina schools. In regard to the questions that asked the teachers how safe lesbian, male students who acted feminine and female students who acted masculine were within their schools, all showed a statistically significant correlation with MHS – G. These correlations suggested that the less homonegative an individual, the more unsafe they believe these students were within their schools. In contrast, when the question was presented with the category of gay students the results did not show a statistically significant correlation. The three correlations (lesbian, male students who acted feminine and female students who acted masculine) that did show a significant effect may help explain why individuals who are more homonegative believe less in the helpfulness and need for resources, such as teacher sensitivity training, anti-harassment and anti-discrimination policies, GSA and having the school's principal or superintendent openly address safety issues to help protect sexual minorities. If an individual believes

sexual minorities and gender non-conforming students are safe or do not care whether they are safe, then they will be in less agreement of the helpfulness of such resources.

Another variable that correlated with an individual's unwillingness to admit or inability to see danger for sexual minorities was when the teachers were asked whether they agree or disagree with the following statement of "Teachers and other school personnel have an obligation to ensure a safe and supportive learning environment for gay, lesbian, and bisexual students." It was found that there was a statistically significant difference in the correlation between individuals who agree or disagreed with the above statement. Individuals who showed more homonegativity showed less agreement with the belief that they have an obligation to ensure a safe and supportive environment for sexual minorities.

#### *External Motivation to Respond without Prejudice*

There was only one independent variable, which was found in question six, that showed a statistically significant difference to the dependent variable of an individual's external motivation to respond without prejudice and that was in regard to the teachers' believed safety of male students who acted feminine. It showed that the safer the teachers reported these gender non-conforming students to be, the more externally motivated were these teachers to respond without prejudice. To get an idea of this sub-group of teachers for question six, it is important to note that individuals who believed males who acted feminine were safer were also more homonegative. These types of trends could be found in the other questions but were not statistically significant. Current research supports the finding that individuals with a higher degree of external motivation report higher levels of explicit race bias than individuals with lower levels of external motivation to respond

without prejudice (Devine, Plant, Amodio, Harmon-Jones & Vance, 2002). The more externally motivated individuals are to respond without prejudice, which also show the highest rates of homonegativity, the more important it may be to consider incorporating external motivations into schools to help protect sexual minority students.

#### *Internal Motivation to Respond without Prejudice*

As previously mentioned, the more internally motivated an individual is to respond without prejudice, the less homonegative they appear (Plant & Devine, 1998; Plant, et al., 2002). Not surprisingly, in this study, the IMS showed significant effects with the MHS – L and the MHS – G, which will be discussed below. Many of the same variables that showed significant effect with the explicit measure of homonegativity also showed such with the IMS. Teachers who identified as non-heterosexual were more internally motivated to respond without prejudice. The more an individual identified as Republican and conservative, the less internally motivated they were to respond without prejudice, which is congruent with past research. The more individuals that a person knew who identified as a sexual minority and the more different categories of individuals, such as co-worker, student, self, etc., the more internally motivated the individual was to respond without prejudice.

There is no comparative data in regard to the IMS against the questions from the GLSEN sponsored research of 2005, but the following information is interesting and important in itself. Questions four through seven asked how safe the teachers felt their students who identified as gay, lesbian, male students who acted feminine and female students who acted masculine were. Although there was no significant effect in regard to lesbian students and their believed safety, there was for the other three categories. The

more internally motivated an individual was to respond without prejudice, the less safe they believed these students were in their schools.

Question eight asked the teachers to rate the following statement, “Teachers and other school personnel have an obligation to ensure a safe and supportive learning environment for gay, lesbian, and bisexual students.” Just as there was a significant effect in regard to the MHS – G, there was also one for the IMS. The less homonegative a person identified and the more internally motivated they were to respond without prejudice, the more they were in agreement with the above statement that they did have an obligation to provide a safe and supportive learning environment for sexual minorities.

As discussed previously, the less homonegative teachers identified as on the MHS- L and MHS – G, the more helpful they believed teacher sensitivity training, anti-harassment policies, GSA clubs, and school principal and/or superintendent openly addressing safety issues would be in creating a more cohesive and nontoxic environment for sexual minorities. Not surprisingly, there was a significant effect for the IMS showing that the more internally motivated the teachers were to respond without prejudice, the more helpful they believed the above four actions would be in providing a safer environment for LGB youth within their schools. As mentioned earlier, this may help support the hypothesis that individuals who are more homonegative and less internally motivated to respond without prejudice would be less likely to have such policies in place and may need outside influence to mandate such protections and resources for sexual minorities.

### *Independent Variables*

The Implicit Association Test did show a significant effect with the MHS – L ( $r = .34$ ). As the IAT increased, which demonstrated more of a positive regard for heterosexuals, the MHS decreased, which showed a higher degree of homonegativity. Norsek and Smyth (2007) investigated 57 different content domains and found the relationship between the IAT and self-report measures disattenuated  $r$  to be .46. A meta-analysis conducted by Hofmann et al. (2005) found estimates of these correlations to be  $r = .24$ . The results of this study are congruent with current research. The parallel scales of MHS – G and MHS – L showed a very high correlation of  $r = .97$ ,  $p < .001$ , which is congruent with current research (Morrison and Morrison, 2011).

The MHS – L and MHS – G were also correlated with the IMS, which is not surprising considering the IMS is often strongly related to explicit measures of prejudicial attitudes. Individuals high in IMS were less likely to respond with bias in explicit measures of prejudiced attitudes (Butz & Plant, 2008; Devine et al., 2002; Plant, 2004; Plant & Devine, 1998). Assessing the source of motivation helps researchers recognize reasons why people may respond without prejudice, which helps identify individuals' regulator efforts. If we can identify the regulator efforts that do work to suppress biases, we may be able to transfer this knowledge to others who have not learned this skill.

### Limitations and Future Research

Several limitations need to be noted so as to be able to understand this research in the appropriate context. First, the use a convenience sample as well as lack of participation from the desired sample caused this study to have a sample that is not

representative of the population. This type of bias greatly limits this study's generalizability to the specified population.

Nonresponse bias takes place when a substantial proportion of your sample chooses not to respond. As discussed earlier, a modest estimate of expected response rates for e-mail based studies averages anywhere between 5% and 30% (Cook, et al., 2000; Fricker & Shonlau, 2002). After sending 11,500 e-mail invitations to middle and high school teachers of South Carolina, less than 1% responded. There were a number of variables that were working against having an average response rate for this study, which included the topic being socially sensitive, the length of the survey, not sending a pre-introduction e-mail, the negative feeling the topic elicited and the fact that the study was measuring the individual's attitudes (Tourangeau, et al., 2010; Groves, et al., 2006).

This study asked for volunteers and because of this it is likely that the individuals who did participate had prior knowledge about the topic of homosexuality and a comfort with discussing this socially sensitive issue. This negated the majority of the subgroup that some may deem most important to this topic, those being individuals who lacked accurate and scientific information about sexual minorities. Many individuals in religious based states are misinformed by church and/or community about the scientific nature of sexual orientation. These individuals view it more as a moral failing or something that can willingly be changed, which prompts negative feelings toward individuals who identify as a sexual minority (Altemeyer & Hunsberger, 1992; Barton, 2010; Fisher, Derison, Polley, Cadman, & Johnston, 1994; Kirkpatrick, 1993; Laythe et al., 2001; Lively, 2009). As discussed by Groves et al. (2006), when the topic creates thoughts that are negative, this tends to suppress participation. A possible remedy for this problem in

the future may be a study that is supported by the government or school district in which participation is mandatory.

It is the opinion of this researcher that for this specific population, southern teachers, the use of an implicit measure that studies the topic of homosexuality, is not needed for future studies if the researcher is using a convenience sample. Very little information was gathered that showed a significant effect for the implicit scale, which, of course, could be attributed to the small sample size. But it is also important to note that the small sample size in this study did not affect the explicit scale's ability to find meaningful associations with the majority of the data gathered. Removing the implicit association test in future research endeavors of this nature shortens the length of the overall study for the participants and saves money in the cost of the study.

It is also suggested to remove the Modern Homonegativity Scale – Lesbian in that the knowledge gained does not exceed the negative effect of the extended time required to administer it. Having the Modern Homonegativity Scale – Lesbian administered in same session as the Modern Homonegativity Scale – Gay likely decreased the effect of separating lesbian and gay individuals. This test being administered so close together is likely to cause participants ascribing similar attributes to both.

The final suggestion would be to add an explicit scale that utilizes more affective domains when measuring attitudes toward homosexuals in southern states. Many people are emotionally involved with their religions in this region, which can create strong reactions to emotionally focused religious questions that are relevant to the topic of homosexuality (Altemeyer & Hunsberger, 1992; Barton, 2010; Fisher, Derison, Polley, Cadman, & Johnston, 1994; Kirkpatrick, 1993; Laythe et al., 2001; Lively, 2009). This is

likely important information that can be utilized by the group who is tasked with educating these teachers about the diversity of their student population in regard to sexual orientation. As was noted in this study, individuals whose schools had anti-discrimination policies that specified protection for sexual minorities showed greater rates of homonegativity. There is a possibility that this is due to an implementation problem, which caused resentment on the parts of the teachers who were forced to up-hold this protection for this minority group. The better we know our population that we wish to educate, the more likely we can cater to their needs. Accepting sexual minorities as equals or as a group that needs protecting, for some, will be a process. Identifying teachers' attitudes toward sexual minorities prior to an intervention and testing their attitudes after an intervention can help identify which interventions are most effective with this particular population. Addressing a group whose fundamental belief is upheld by the literal understandings of the Bible, which in this case, is in opposition to scientific research, is going to be a struggle for not only the participants but the group leader whose mission it is to educate these teachers about sexual minorities. The more information we can obtain the easier and more efficient, hopefully, this process will be.

### Conclusions

Research has established that sexual minority youth experience a wide range of harassment and discrimination within their schools at a higher rate than their peers. This negative and unsafe school experience includes such things as verbal harassment, physical harassment and/or physical assault. The majority of studies suggests that LGB youth experience greater mental anguish and greater health problems and risks than their heterosexual counterparts due to increased stressors caused by discrimination and

harassment (Almeida, Johnson, Cotliss, Molnar & Azrael, 2009; Birkett, Espelage, & Koenig, 2009; Bontemp & D'Augelli, 2002; D'Augelli, Pilkington & Hershberger, 2002; Espelage, Aragon, Birkett, & Koenig, 2008; Hershberger & D'Augelli, 1995; Kosciw et al., 2008; Martin & Hetrick, 1988; Murdock & Bolch, 2005; Russell, Seif, & Truong, 2001; Swearer, Turner, Givens, & Pollack, 2008).

Through years of research, a number of protective factors have been identified that counter these risk factors as well as promote resilience outcomes. These include Gay-Straight Alliances or similar type clubs, teacher training to promote a safe school climate and policies, both state and local, that prohibit harassment or discrimination based on sexual orientation or perceived sexual orientation (Goodenow, Szalacha, & Westheimer, 2006; Hansen, 2007; Kosciw et al., 2008; O'Shaughnessy, Russell, Heck, Calhoun, & Laub, 2004; Szalacha, 2003). This study identified a resounding resistance to address a topic such as homosexuality and verified the lack of protective factors present in the schools of South Carolina, which support the notion that federal policy is needed to protect sexual minority youth in states such as South Carolina.

The first protective factors that will be discussed are the leadership clubs, such as GSAs, that empower youth to end discrimination in their schools based on sexual orientation and/or gender identity. It is reported that in the last 6 years GSAs have quadrupled in size; it is one of the fastest growing students clubs in the nation. GLSEN reported that as of 2008 over 4,000 GSAs were registered nationwide (GLSEN, 2012b; Sean, Maralee, & Chenneville, 2012). In 2007, South Carolina only had 12 registered (GLSEN, 2007). Research from this study estimated only 6% of SC schools have GSAs with the national average from 2005 reporting an average of 22% (Harris Interactive &

GLSEN, 2005). Many schools require a teacher or staff member to sponsor the GSA clubs, which may not be easy to find in the schools of South Carolina (GLSEN, 2012d). Southern teachers who identify as LGB may not do so within their schools because there is no employment protection for them at this time. Many LGB teachers, understandably, would not want undue attention focused on them if it meant the loss of their job if they were “outed” or suspected to be non-heterosexual. In fact, this study revealed that only 26% of the sample knew a co-worker who identified as a sexual minority compared to the national average from seven years ago of 48% (Harris Interactive & GLSEN, 2005). The climate for teachers needs to change so that the LGB teachers who could be great role models and allies for the students are comfortable openly identifying as LGB in their schools. LGB teachers are great candidates to sponsor GSA within these schools, where currently few exist. These non-heterosexual youth need the support and safety that GSAs can offer that help protect their well-being, both mentally and physically, and they need mentors to help lead them.

The response rate of this study was far below the average for web-based or e-mail based surveys, especially with the compensation and accessibility this study offered. Participation of a sample can average between 5% - 30% for studies such as these (Cook et al., 2000; Fricker & Shaonlau, 2002; Sheehan, 2001). After sending 11,500 e-mail invitations to middle and high school teachers of South Carolina, less than 1% responded. Past research has identified factors such as the lack of interest in a topic, the socially sensitive nature of a topic as well as the negative feelings it may elicit to be contributing factors to low response rates, which is very likely what occurred with this study (Groves, et al., 2006; Tourangeau, et al., 2010). This lack of interest seems to have permeated to

the school administration because at this time only 15% of teachers have had sensitivity training or diversity training that supports and accepts gay, lesbian, bi-sexual youth. A GLSEN sponsored survey from 1998, which surveyed 42 of America's largest school districts, accounting for 10% of the student population in the nation, found that 25% of the schools provided training for staff on making schools safer for LGBT students (GLSEN, 2012c).

This study may reveal possible reasons why South Carolina has not acted in the best interest of sexual minority youth to date. As mentioned above, the mere resistance to participate in this study with the topic of homosexuality speaks to the possible contempt or lack of interest in the sexual minority youth population of their schools. Also, teachers who were more homonegative felt sexual minority youth were in less danger than teachers who were less homonegative. Teachers who are more homonegative may reason that if sexual minorities are not being treated inappropriately or are not in danger, they do not need protection. Finally, teachers who were more homonegative also had less of a desire to implement needed anti-discrimination policies, teacher sensitivity training or promote GSA clubs within their schools to help protect sexual minorities.

Currently much energy and money is being invested by the Alliance Defense Fund, a Christian Right group, that seeks to "overturn anti-bullying school guidelines" meant to offer protection to sexual minorities, "on the grounds that such policies persecute the 'Christian perspective' and serve as a front for promoting 'homosexual lifestyle choices' and 'homosexual values' among public school children" (Stewart, 2012, p. 83). Advocates in Southern states, who desire protection for sexual minority youth, are neither numerous nor influential enough to force such policies into state legislation,

which would address all public schools in a state. As per this study, only 20% of SC schools have an anti-harassment policy that specifies sexual minorities as a group that needs protection. The GLSEN sponsored study from seven years ago showed that 56% of national schools had such a policy specific to sexual minorities in place (Harris Interactive & GLSEN, 2005).

In June of 2006, South Carolina passed the Safe School Climate Act, which was intended to protect students from harassment, intimidation and/or bullying. This State Act, upon inception, did not and currently does not include sexual orientation as a specific minority group that needs protection, like race, creed, color or national origin, which are already part of anti-harassment policies within the schools and state. In fact, they have a provision within this act that states, "Nothing in this act may be construed to create any classification, protected class, suspect category, or preference beyond those existing in present statute or case law" (South Carolina Legislature, 2012). Terry (2010), a researcher who focused his research in the state of South Carolina, asked the question, "Do you think that the Safe School Climate Act (June 2006) exerts the needed pressure on schools and school districts so public school students feel free from harassment, intimidation, and bullying?" The majority of the SC teachers sampled, who were graduates of a master's degree program in school leadership, answered "no" or "I don't know" (63%). Terry (2010) found that 75% of the respondents believed that harassment, intimidation and bullying were still a problem in South Carolina Schools. Although South Carolina has amended this act to create more accountability, these suggestions have not been implemented to date (South Carolina Legislature, 2012).

Teachers are an integral part of a student's life and society owes a great debt to them for their dedication and hard work but, at this time, South Carolina's teachers do not appear to have interest in the topic of homosexuality nor do many of their schools possess protective factors for sexual minorities. Learning to accept sexual minorities as equals and as a group that needs protecting is a process and unfortunately it will need to begin on the federal level as opposed to the state. This study is a testament to the need for Congress to pass such legislation as the Safe Schools Improvement Act and amend the Civil Rights Act of 1964 to include sexual orientation (National Archives, 2012; Russel, Kosciw, Horn & Saewyc, 2010).

The Safe Schools Improvement Act addresses bullying and harassment on the basis of actual or perceived race, color, national origin, sex, disability, sexual orientation or gender identity. This bill protects these students by holding all public schools, in all states, accountable for measuring the incidents of bullying and harassment, implementing an intervention to combat the rate of harassment and then reporting on their progress (Russell, et al., 2010). Finally, the Civil Rights Act of 1964 should be amended to include sexual orientation in the categories of individuals who need protection from discrimination. This inclusion would give both public and private employees and students the needed protection to hold their schools and places of work accountable through legal recourse, if necessary, an unfortunate necessity if rights for all men and women are to be upheld (National Archives, 2012).

From the beginning of peoples' education in the social sciences or even business management, they are taught that bottom-up change is always better and more efficient than top-to-bottom (Jensen, 2011; Nadler, Malloy & Fisher, 2008; Perez-Koenig & Rock,

2001). However, in some states, the people are shielded from the decades of research attesting to the needs of sexual minorities and even given mis-information by their leaders. When states have chosen to operate irrespective of the harm it is instigating on a sub-group of children, the top or rather the federal government must intervene. It is now time for the leaders of this county to act and reclaim their pledge of allegiance that promises “liberty and justice for all”.

## REFERENCES

- Abramson, L., Metalsky, G. & Alloy, L. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review*, 96, 358-372.
- Akrami, N. & Ekehammar, B. (2005). The association between implicit and explicit prejudice: The moderating role of motivation to control prejudiced reactions. *Scandinavian Journal of Psychology*, 46, 361-366.
- Alexander, M., Santo, J., Cunha, J., Weber, L. & Russel, S. (2011). Effects of homophobic versus nonhomophobic victimization on school commitment and the moderating effects of teacher attitudes in Brazilian public school. *Journal of LGBT Youth*, 8, 289-308.
- Almeida J., Johnson R. M., Corliss H. L., Molnar B. E., & Azrael D. (2009). Emotional distress among LGBT youth: The influence of perceived discrimination based on sexual orientation. *Journal of Youth & Adolescence*, 38, 1001-1014.
- Altemeyer, B (1981). *Right-wing authoritarianism*. Winnipeg, Canada: University of Manitoba Press.
- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.
- Altemeyer, B. (2005). Fundamentalism and authoritarianism. In *Handbook of psychology of religion and spirituality* (pp. 378-393). New York: Guilford.
- Altemeyer, B. & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, quest, and prejudice. *The International Journal for the Psychology of Religion*, 2, 113-133.

- Altemeyer, B. & Hunsberger, B. (2004). A revised religious fundamentalism scale: The short and sweet of it. *The International Journal for the Psychology of Religion*, 14, 47-54.
- American Academy of Pediatrics, Committee on Adolescence. (1983). Homosexuality and adolescence. *Pediatrics*, 72, 249-250.
- Asendorpf, J., Banse, R. & Mücke, D. (2002). Double dissociation between explicit and implicit personality self-concept: The case of shy behavior. *Journal of Personality and Social Psychology*, 83, 380-393.
- Azar, B. (2008). IAT: Fad or Fabulous? *Monitor on Psychology*, 39, 44. Retrieved from <http://www.apa.org/monitor/2008/07-08/psychometric.aspx>
- Bailey, J., Farquhar, C., Owen, C. & Whittaker, D. (2003). Sexual behavior of lesbians and bisexual women. *Sexually Transmitted Infections*, 79, 147-150.
- Balanko, S. (1998). *Anti-gay violence at the University of Saskatchewan*. Poster presented at 59<sup>th</sup> annual convention of the Canadian Psychological Association.
- Banse, R., Seise, J. & Zerbes, N. (2001). Implicit attitudes toward homosexuality: reliability, validity, and controllability of the IAT. *Zeitschrift für Experimentelle Psychologie*, 48, 1145-1160.
- Barth, J. and Parry, J. (2009). The Impact of Contact with Gay and Lesbian Couples on Attitudes about Gays/Lesbians and Gay-Related Policies. *Politics & Policy*, 37, 31–50.
- Barton, B. (2010). “Abomination” – Life as a Bible Belt gay. *Journal of Homosexuality*, 57, 465-484.

- Batcheler, L. (2009). Gender difference in heterosexuals' implicit attitudes toward gay men and lesbians (Doctoral dissertation, Oklahoma State University, 2009). Proquest Dissertations and Thesis Database, Retrieved from <http://search.proquest.com/docview/305084455?accountid=14707>
- Bennett, J. (2000). Mediator and moderator in nursing research: Conceptual and statistical differences. *Research in Nursing and Health*, 23, 415-420.
- Bennett, G., Wolin, K., Robinson, E., Fowler, S. & Edwards, C. (2005). Racial/ethnic harassment and tobacco use among African American youth adults. *American Journal of Public Health*, 95, 238-240.
- Bernstein, D., Clarke-Stewart, A., Roy, E. & Wickens, C. (1997). *Annotated instructor's edition: Psychology* (4<sup>th</sup> ed.). Boston, MA: Houghton Mifflin Company.
- Birkett M., Espelage D. L., & Koenig B. (2009). LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth and Adolescence*, 38, 989-1000.
- Black, K. & Stevenson, M. (1984). The relationship of self-reported sex-role characteristics and attitudes toward homosexuality. *Journal of Homosexuality*, 10, 83-93.
- Blascovich, J., Mendes, W., Hunter, S., Lickel, B. & Kawai-Bell (2001). Perceiver threat in social interactions with stigmatized others. *Journal of Personality and Social Psychology*, 80, 253-267.
- Bontempo, D. E. & D'Augelli, A. R. (2002). Effects of at-school victimization and sexual orientation on lesbian, gay, or bisexual youths' health risk behavior. *The Journal of Adolescent Health*, 30, 364-374.

- Bosson, J., Swann, W. & Pennebaker, J. (2000). Stalking the perfect measure of implicit self-esteem: The blind men and the elephant revisited? *Journal of Personality and Social Psychology*, 79, 631-643.
- Brauer, M., Wasel, W. & Niedenthal, P. (2000). Implicit and explicit components of prejudice. *Review of General Psychology*, 4, 79-101.
- Brooks, V. (1981). *Minority stress and lesbian women*. Lexington, MA: Lexington Books.
- Burgard, S., Cochran, S. & Mays, V. (2005). Alcohol and tobacco use patterns among heterosexually and homosexually experienced California women. *Drug & Alcohol Dependence*, 77, 61-70.
- Bux, D. A., Jr. (1996). The epidemiology of problem drinking in gay men and lesbians: A critical review. *Clinical Psychology Review*, 16, 277-298.
- Cabaj, R. & Stein, T. (Ed.). (1996). *Textbook of homosexuality and mental health*. Washington, DC: American Psychiatric Press.
- Cass, V. C. (1979). Homosexual identity formation: A theoretical model. *Journal of Homosexuality*, 4, 219-235.
- Chamie, J. & Mirkin, B. (2011). Same-sex marriage: A new social phenomena. *Population and Development Review*, 37, 529-551.
- Chang, E. (Ed.). (2001). *Optimism and pessimism: Implications for theory, research, and practice*. Washington, DC: American psychological Association.
- Child Evangelism Fellowship of South Carolina, (2012). South Carolina public schools after-school Good News Club listing. Retrieved from [http://www.cef-sc.org/school\\_boards/SC-GNC-LISTING.pdf](http://www.cef-sc.org/school_boards/SC-GNC-LISTING.pdf)

- Christie, R. (1991). Authoritarianism and related constructs. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp.501-572). San Diego, CA: Academic.
- Cochran, S. (2001). Emerging issues in research on lesbians' and gay men's mental health: Does sexual orientation really matter? *American Psychologist*, *56*, 931-947.
- Cochran, B., Peavy, K. M., & Cauce, A. M. (2007). Substance abuse treatment providers' explicit and implicit attitudes regarding sexual minorities. *Journal of Homosexuality*, *53*, 181-207.
- Cochran, B., Stewart, A., Ginzler, J. & Cauce, A. (2002). Challenges faced by homeless sexual minorities: Comparison of gay, lesbian, bisexual, and transgendered homeless adolescents with their heterosexual counterparts. *American Journal of Public Health*, *92*, 773-777.
- Cohen, J. (1977). *Statistical power analysis for the behavioral sciences* (Rev. ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Cohen, S. & Willis, T. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310-357.
- Cornelius-White, J. (2007). Learning-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research*, *77*, 113-143.
- Crosby, F., Bromley, S. & Saxe, L. (1980). Recent unobtrusive studies of Black and White discrimination and prejudice: A literature review. *Psychological Bulletin*, *87*, 546-563.

- Crosby, G., Stall, R., Paul, J. & Barrett, D. (1998). Alcohol and drug use patterns have declined among generations of gay-bisexual men in San Francisco. *Drug and Alcohol Dependence*, 52, 177-182.
- Crowne, D. & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Cunningham, W., Preacher, K., & Banaji, M. (2001). Implicit attitude measures: Consistency, stability, and convergent validity. *Psychological Science*, 12, 163-170.
- D'Augelli, A. & Hershberger, S. (1993). Lesbian, gay, and bisexual youth in community settings: Personal challenges and mental health problems. *American Journal of Community Psychology*, 21, 421-448.
- D'Augelli, A. R., Pilkington, N. W., & Hershberger, S. L. (2002). Incidence and mental health impact of sexual orientation victimization of lesbian, gay, and bisexual youths in high school. *School Psychology Quarterly*, 17, 148-167.
- Dasgupta, N., McGhee, D., Greenwald, A. & Banaji, M. (2000). Automatic preference for white Americans: Eliminating the familiarity explanation. *Journal of Experimental Social Psychology*, 36, 316-328.
- Dasgupta, N. & Rivera, L. (2006). From automatic antigay prejudice to behavior: The moderating role of conscious beliefs about gender and behavioral control. *Journal of Personality and Social Psychology*, 91, 268-280.
- Devine, P. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, 56, 5-18.

- Devine, P., Plant, E., Amodio, D., Harmon-Jones, E. & Vance, S. (2002). The regulation of explicit and implicit race bias: The role of motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 82, 834-848.
- Dietz, T. J. (1997). The impact of membership in a support group for gay, lesbian, and bisexual students. *Journal of College Student Psychotherapy*, 12, 57-72.
- DiPlacido, J. (1998). Minority stress among lesbians, gay men, and bisexuals: A consequence of heterosexism, homophobia, and stigmatization. In G. M. Herek (Ed.), *Stigma and sexual orientation: Vol. 4. Understanding prejudice against lesbians, gay men, and bisexuals (pp.138-159)*. Thousand Oaks, CA: Sage.
- Dorf, Michael (2011). Same-sex marriage, second-class citizenship, and law's social meanings. *Virginia Law Review*, 97, 1267-1346.
- Dovidio, J. & Fazio, R. (1992). New technologies for direct and indirect assessment of attitudes. In J. M. Tanur (Ed.), *Questions about questions: Inquiries into the cognitive bases of surveys (pp. 203-237)*. New York: Russell Sage Foundation.
- Dovidio, J. & Gaertner, S. (1986). Prejudice, discrimination and racism: Historical trends and contemporary approaches. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism (pp. 1-34)*. San Diego, CA: Academic Press.
- Dovidio, J., Kawakami, K. & Gaertner, S. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology*, 82, 62-68.
- Dovidio, J., Kawakami, K., Johnson, C., Johnson, B. & Howard, A. (1997). On the nature of prejudice: Automatic and controlled processes. *Journal of Experimental Social Psychology*, 33, 510-540.

- Dunton, B. & Fazio, R. (1997). An individual difference measure of motivation to control prejudiced reactions. *Personality and Social Psychology Bulletin*, 23, 316-326.
- Eisenberg, M. & Resnick, M. (2006). Suicidality among gay, lesbian, and bisexual youth: The role of protective factors. *Journal of Adolescent Health*, 39, 662-668.
- Elze, D. (2002). Risk factors for internalizing and externalizing problems among gay, lesbian, and bisexual adolescents. *Social Work Research*, 26, 89-100.
- Espelage, D. L., Aragon, S. R., Birkett, M., & Koenig, B. W. (2008). Homophobic teasing, psychological out- comes, and sexual orientation among high school students: What influence do parents and schools have? *School Psychology Review*, 37, 202-216.
- Fazio, R. (2007). Attitudes of object-evaluation association of varying strength. *Social Cognition*, 25, 603-637.
- Fazio, R. & Olson, M. (2003). Implicit measures in social cognition research: Their meaning and use. *Annual Review of Psychology*, 54, 297-327.
- Fazio, R., Jackson, J., Dunton, B. & Williams, C. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology*, 69, 1013-1027.
- Fergusson, D. M., Horwood, L. J. & Beautrais, A. L. (1999). Is sexual orientation related to mental health problems and suicidality in young people? *Archives General Psychology*, 56, 2426-2432.
- Finlay, B. & Walther, C. (2003). The relation of religious affiliation, service attendance, and other factors to homophobic attitudes among university students. *Review of Religious Research*, 44, 370-393.

- Fisher, R., Derison, D., Polley III, C., Cadman, J. & Johnston, D (1994). Religiousness, religious orientation, and attitudes towards gays and lesbians. *Journal of Applied Social Psychology, 24*, 614-630.
- Frable, D., Wortman, C. & Joseph, J. (1997). Predicting self-esteem, well-being, and distress in a cohort of gay men: The importance of cultural stigma, personal visibility, community networks and positive identity. *Journal of Personality, 65*, 599-624.
- Frable, D., Wortman, C. & Fisher, W. (1992). Predicting self-esteem, well-being, and distress in a cohort of gay men: The importance of cultural stigma, personal visibility, community network, and positive identify. *Journal of Personality, 65*, 598-624.
- Fraser, B., Walberg, H., Welch, W., & Hattie, J. (1987). Syntheses of educational productivity research. *International Journal of Educational Research, 11*, 144-252.
- French, S., Story, M., Remafedi, G., Resnick, M. & Blum, R. (1996). Sexual orientation and prevalence of body dissatisfaction and eating disordered behaviors: A population based study of adolescents. *International Journal of Eating Disorders, 19*, 119-126.
- Gabriel, U., Banse, R., & Hug, F. (2007). Predicting private and public helping behavior by implicit attitudes and the motivation to control prejudiced reactions. *British Journal of Social Psychology, 46*, 365-382.
- Garland, A.F., Hough, R.L., McCabe, K.M., Yeh, M., Wood, P.A. & Aarons, G.A. (2001). Prevalence of psychiatric disorders in youths across five sectors of care.

*Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 409–418.

Gay, Lesbian & Straight Education Network (2007). Number of Gay-Straight Alliance registrations passes 3,500. Retrieved from <http://www.glsen.org/cgi-bin/iowa/all/news/record/2100.html>

Gay, Lesbian, and Straight Education Network. (2011). *States with safe schools laws*. Retrieved from <http://www.glsen.org/cgi-bin/iowa/all/library/record/2344.html?state=media>.

Gay-Straight Alliance Network (2012a). Mission. Retrieved from <http://www.gsanetwork.org/about-us>

Gay, Lesbian & Straight Education Network (2012b). Background and information on Gay-Straight Alliance. Retrieved from <http://www.glsen.org/cgi-bin/iowa/all/library/record/2336.html>

Gay, Lesbian & Straight Education Network (2012c). GLSEN lunchbox training program. Retrieved from <http://idahossc.com/wp-content/uploads/2010/03/GLSEN-Lunchbox-Training-Program.pdf>

Gay, Lesbian & Straight Network (2012d). The GLSEN jump-start guide for gay-straight alliances. Retrieved from <http://www.glsen.org/cgi-bin/iowa/all/library/record/2226.html>

Gerbner, G., Gross, L., Morgan, M. & Signorielli, N. (1994). Political correlates of television viewing. *Public Opinion Quarterly*, 48, 283-300.

Gilman, S., Cochran, S., Mays, V., Hughes, M., Ostrow, D. & Kessler, R. (2001). Risks of psychiatric disorders among individual reporting same-sex sexual partners in

- the National Comorbidity Survey. *American Journal of Public Health*, 91, 114-122.
- Goldfried, M. & Goldfried, A. (2001). The importance of parental support in the lives of gay, lesbian, and bisexual individuals. *Journal of Clinical Psychology*, 57, 681-693.
- Goldman, L. (2008). *Coming out, coming in: Nurturing the well-being and inclusion of gay youth in mainstream society*. New York: Routledge.
- Goldman, M., Brown, S. & Christiansen, B. (1987). Expectancy theory: Thinking about drinking. In H. T. Blane & K. E. Leonard (Eds.), *Psychological theories of drinking and alcoholism* (pp. 181-226). New York: Guilford Press.
- Gonsiorek, J. & Weinrich, J. (Ed.). (1991). *Homosexuality: Research implication for public policy*. Newbury Park, CA: Sage Publications.
- Goodenow, C., Szalacha, L., & Westheimer, K. (2006). School support groups, other school factors, and the safety of sexual minority adolescents. *Psychology in the Schools*, 43, 573-589.
- Gorsuch, R. & McFarland, S. (1972). Single versus multiple-item scales for measuring religious values. *Journal for the Scientific Study of Religion*, 11, 53-64.
- Greeley, J. & Oei, T. (1999). Alcohol and tension reduction. In K. E. Leonard & H. T. Blane (Eds.), *Psychological theories of drinking and alcoholism* (pp. 14-53). New York: Guilford Press.
- Greenberg, L. (2002). *Emotional-focused therapy: Coaching clients to work through feelings*. Washington, DC: American Psychological Association Press.

- Greenwald, A. & Farnham, S. (2000). Using the Implicit Association Test to measure self-esteem and self-concept. *Journal of Personality and Social Psychology*, 79, 1022-1038.
- Greenwald, A. G., McGhee, D. E. & Schwartz, J. K. L. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology*, 74, 1464-1480.
- Greenwald, A. & Nosek, B. (2001). Health of the Implicit Association Test at age 3. *Zeitschrift fur Experimentelle Psychologi*, 48, 85-93.
- Greenwald, A. G., Poehlman, T. A., Uhlmann, E. & Banaji, M. R. (2009). Understanding and using the Implicit Association Test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology*, 97, 17-41.
- Grolnick, W. & Ryan, R. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, 52, 890-898.
- Groves, R., Couper, M., Presser, S., Singer, E., Tourangeau, R., Acosta, G. et al. (2006). Experiments in producing nonresponse bias. *Public Opinion Quarterly*, 20, 720-735.
- Ham, L. & Hope, D. (2003). College students and problematic drinking: A review of the literature. *Clinical Psychology Review*, 23, 719-759.
- Hansen, A. L. (2007). School-based support for GLBT students: A review of three levels of research. *Psychology in the Schools*, 44, 839-848.
- Harris Interactive & GLSEN (2005). *From Teasing to Torment: School Climate in America, A Survey of Students and Teachers*. New York: GLSEN.

- Hart, A., Whalen, P., Shin, L., McInerney, S., Fischer, H. & Rauch, S. (2000). Differential response in the human amygdale to racial outgroup vs. ingroup face stimuli. *Neuroreport*, *11*, 2351-2355.
- Haslam, N. & Levy, S. (2006). Essentialist beliefs about homosexuality: Structure and implication for prejudice. *Personality and Social Psychology Bulletin*, *32*, 471-485.
- Hathcoat, J. & Barnes, L. (2010). Explaining the relationship among fundamentalism and authoritarianism: An epistemic connection. *The International Journal for the Psychology of Religion*, *20*, 73-84.
- Hatzenbuehler, M. (2009). How does sexual minority stigma “get under the skin”? A psychological mediation framework. *Psychological Bulletin*, *135*, 707-730.
- Hatzenbuehler, M., Corbin, W. & Fromme, K. (2008). Trajectories and determinants of alcohol use among sexual minority young adults and their heterosexual peers: Results from a prospective study. *Developmental Psychology*, *44*, 81-90.
- Hatzenbuehler, M., Corbin, W. & Fromme, K. (2011). Discrimination and alcohol-related problems among college students: A prospective examination of mediating effects. *Drug & Alcohol Dependence*, *115*, 213-220.
- Heffernan, K. (1998). The nature and predictors of substance use among lesbians. *Addictive Behaviors*, *23*, 517-528.
- Hegna, K., Kristiansen, H. & Moseng, B. (1999). *Living conditions and quality of life among lesbian women and gay men*. Oslo: Nova.
- Hense, R., Penner, L. & Nelson, D. (1995). Implicit memory for age stereotypes. *Social Cognition*, *13*, 399-415.

- Herek, G. (1987). Religious orientation and prejudice: A comparison of racial and sexual attitudes. *Personality and Social Psychology Bulletin*, 13, 34-44.
- Herek, G. (1988). Heterosexuals' attitudes toward lesbians and gay men: Correlates and gender differences. *Journal of Sex Research*, 25, 451-477.
- Herek, G. (1994). Assessing heterosexuals' attitudes toward lesbians and gay men: A review of research with the ATGL scale. In B. Greene & G. M. Herek (Eds.), *Lesbian and gay psychology: Theory, research, and clinical applications* (pp.206-228). Thousand Oak, CA: Sage.
- Herek, G. (1998). *Stigma and sexual orientation: Understanding prejudice against lesbians, gay men, and bisexuals*. Thousand Oaks, CA: Sage Publications.
- Herek, G. (2000). The psychology of sexual prejudice. *Current Directions in Psychological Sciences*, 9, 19-22.
- Herek, G. (2002). Gender gaps in public opinion about lesbians and gay men. *Public Opinion Quarterly*, 66, 40-66.
- Herek, G. (2003). Evaluating interventions to alter sexual orientation: Methodological and ethical considerations. *Archives of Sexual Behavior*, 32, 438-439.
- Herek, G. (2004). Beyond "Homophobia": Thinking about sexual prejudice and stigma in the twenty-first century. *Sexuality Research and Social Policy*, 1, 6-24.
- Herek, G. & Capitano, J. (1996). "Some of my best friends": Intergroup contact, concealable stigma, and heterosexuals' attitudes toward lesbians and gay men. *Personality and Social Psychology Bulletin*, 22, 412-424.

- Herek, G., Gillis, J. & Cogan, J. (1999). Psychological sequelae of hate crime victimization among lesbian, gay, and bisexual adults. *Journal of Consulting and Clinical Psychology, 67*, 945-951.
- Herrell, R., Goldberg, J., True, W., Ramakrishnam, V., Lyons, M., Eisen, S. & Tsuang, M. (1999). Sexual orientation and suicidality: A co-twin control study in adult men. *Archives of General Psychiatry, 56*, 867-874.
- Hershberger, S. L., & D'Augelli, A. R. (1995). The impact of victimization on the mental health and suicidality of lesbian, gay, and bisexual youths. *Developmental Psychology, 31*, 65-74.
- Hershberger, S. L., Pilkington, N. W. & D'Augelli, A. R. (1997). Predictors of suicide attempts among gay, lesbian, and bisexual youth. *Journal of Adolescent Research, 12*, 447-497.
- Hetrick, E. & Martin, A. (1987). Developmental issues and their resolution for gay and lesbian adolescents. *Journal of Homosexuality, 14*, 25-43.
- Hetts, J., Sakuma, M. & Pelham, B. (1999). Two roads to positive regard: Implicit and explicit self-evaluation and culture. *Journal of Experimental Social Psychology, 35*, 512-559.
- Higgins, E. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319-340.
- Hinrichs, D. & Rosenberg, P. (2002). Attitudes toward gay, lesbian, and bisexual person among heterosexual liberal arts college students. *Journal of Homosexuality, 43*, 61-84.

- Hippel, W. von, Sekaquaptewa, D. & Vargas, P. (1997). The linguistic intergroup bias as an implicit indicator of prejudice. *Journal of Experimental Social Psychology, 33*, 490-509.
- Hoffman, A. & Bakken, L. (2001). Are educational and life experiences related to homophobia? *Educational Research Quarterly, 24*, 67-82.
- Hofman, W., Gawronski, B., Gschwendner, T., Le, H. & Schmitt, M. (2005). A meta-analysis on the correlation between the Implicit Association Test and explicit self-report measures. *Personality and Social Psychology Bulletin, 31*, 1369-1385.
- Hudson, W. & Ricketts, W. (1980). A strategy for the measurement of homophobia. *Journal of Homosexuality, 5*, 357-372.
- Hunsberger, B. (1995). Religion and prejudice. The role of religious fundamentalism, quest, and right-wing authoritarianism. *Journal of Social Issues, 51*, 113-129.
- Hunsberger, B., Alisat, S., Pancer, S. & Pratt, M. (1996). Religious fundamentalism and religious doubts: Content, connections, and complexity of thinking. *The International Journal for the Psychology of Religion, 6*, 201-220.
- Hunsberger, B., Owusu, V. & Duck, R. (1999). Religion and prejudice in Ghana and Canada: Religious fundamentalism, right-wing authoritarianism and attitudes toward homosexuals and women. *The International Journal for the Psychology of Religion, 9*, 181-194.
- Hunter, J. (1990). Violence against lesbian and gay male youths. *Journal of Interpersonal Violence, 5*, 295-300.
- Inzlicht, M., McKay, L. & Aronson, J. (2006). Stigma as ego depletion: How being the target of prejudice affects self-control. *Psychological Science, 17*, 262-269.

- Inzlicht, M., McKay, L. & Aronson, J. (2006). Stigma as ego depletion: How being the target of prejudice affects self-control. *Psychological Science, 17*, 262-269.
- Jacobs, C. (1996). Out of the closet, into the attic: The development of services for lesbian, gay, bisexual, transgendered and questioning youth (The Union Institute). *Dissertation Abstracts International, 5703B*, 2176.
- Jellison, W., McConnel, A. & Gabriel, S. (2004). Implicit and explicit measures of sexual orientation attitudes: Ingroup preferences and related behaviors and beliefs among gay and straight men. *Personality and Social Psychology Bulletin, 30*, 629-642.
- Jensen, Mark (2011). *Civil society in liberal democracy*. New York: Routledge.
- Jones, E. & Sigall, H. (1971). The bogus pipeline: A new paradigm for measuring affect and attitude. *Psychological Bulletin, 76*, 349-364.
- Jones, Jeffrey (2012). More states move to GOP in 2011. Retrieved from Gallup website: <http://www.gallup.com/poll/152438/States-Move-GOP-2011.aspx#3>
- Jones, Jeffrey (2011). Mississippi rates as the most conservative U. S. state. Retrieved from Gallup website: <http://www.gallup.com/poll/146348/mississippi-rates-conservative-state.aspx#1>
- Jöreskog, K. & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Hillsdale, NJ: Erlbaum.
- Joseph, Cameron (2012, January). Santorum endorser attacks Romney on Mormonism and homosexuality. The Hill, ballot box. Retrieved from <http://thehill.com/blogs/ballot-box/gop-presidential-primary/204969-santorum-endorser-attacks-romney-on-mormonism-homosexuality>

- Just the Facts Coalition. (2008). *Just the facts about sexual orientation and youth: A primer for principals, educators, and school personnel*. Washington, DC: American Psychological Association. Retrieved from [www.apa.org/pi/lgbc/publications/justthefacts.html](http://www.apa.org/pi/lgbc/publications/justthefacts.html).
- Kawachi, I. & Berkman, L. (2001). Social ties and mental health. *Journal of Urban Health, 78*, 458-467.
- Kelly, A. (1998). Clients' secret keeping in outpatient therapy. *Journal of Counseling Psychology, 45*, 50-57.
- Kessler, R., Mickelson, K. & Williams, D. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior, 40*, 208-230.
- Kirkpatrick, L. (1993). Fundamentalism, Christian orthodoxy, and intrinsic religious orientation as predictors of discriminatory attitudes. *Journal for the Scientific Study of Religion, 32*, 256-268.
- Kite, M. & Whitley, B., Jr. (1996). Sex differences in attitudes toward homosexual persons, behaviors, and civil rights: A meta-analysis. *Personality and Social Psychology Bulletin, 22*, 336-353.
- Koestner, R., Bernieri, F. & Zukerman, M. (1992). Self-regulation and consistency between traits, attitudes, and behavior. *Personality and Social Psychology Bulletin, 18*, 52-59.
- Kosciw, J. & Diaz, E. (2006). *The 2005 national school climate survey: The experiences of lesbian, gay, bisexual, and transgender youth in our nation's schools*. New York, NY: Gay, Lesbian, and Straight Education Network (GLSEN).

- Kosciw, J. G., Greytak, E. A., Diaz, E. M. & Bartkiewicz, M. J. (2010). *The 2009 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools*. New York: Gay, Lesbian, Straight Education Network.
- Krieger, N. & Sidney, S. (1997). Prevalence and health implication of anti-gay discrimination: A study of Black and White women and men in CARDIA cohort. *International Journal of Health Services*, 27, 157-176.
- Kruks, G. (1991). Gay and lesbian homeless/street youth: Special issues and concern. *Journal of Adolescent Health*, 12, 515-518.
- Lambda Legal. (2001). *Youth in the margins: A report on the unmet needs of lesbian, gay, bisexual, transgendered adolescents in foster care*. New York: Lambda Legal. Retrieved from <http://data.lambdalegal.org/pdf/28.pdf>
- Landen, M. & Innala, S. (2002). The effect of a biological explanation on attitudes towards homosexual persons: A Swedish national sample study. *Nordic Journal of Psychiatry*, 56, 181-186.
- Landrine, H., Klonoff, E. & Alcaraz, R. (1996). Asking age and ID may reduce minors' access to tobacco. *Preventive Medicine*, 25, 301-306.
- Larson, K., Reed, M. & Hoffman, S. (1980). Attitudes of heterosexuals toward homosexuals: A Likert-type scale and construct validity. *Journal of Sex Research*, 16, 245-257.
- Laythe, B., Finkle, D. & Kirkpatrick, L. (2001). Predicting prejudice from religious fundamentalism and right-wing authoritarianism: A multiple regression approach. *Journal for the Scientific Study of Religion*, 40, 99-111.

- Lenz-Rashid, S. (2006). Employment experiences of homeless young adults: Are they different for youth with a history of foster care? *Children and Youth Services Review, 28*, 235-259.
- Lewis, G. (2003). Black-white differences in attitudes toward homosexuality and gay rights. *Public Opinion Quarterly, 67*, 89 – 78.
- Lewis, N. (2009). Mental health in sexual minorities: Recent indicators, trends, and their relationship to place in North America and Europe. *Health & Place, 15*, 1029-1045.
- Linehan, M. (1993). *Cognitive behavioral treatment of borderline personality disorder*. New York: Guilford Press.
- Link, B.G. & Phelan, J.C. (2001). Conceptualizing stigma. *Annual Review of Sociology, 27*, 363–385.
- Link, B., Struening, E., Rahav, M., Phelan, J. & Nuttbrock, L. (1997). On stigma and its consequences: Evidence from a longitudinal study of men with dual diagnosis of mental illness and substance abuse. *Journal of Health and Social Behavior, 38*, 177-190.
- Linneman, T. (2004). God, sex, and politics: Homosexuality and everyday theologies. *American Journal of Sociology, 111*, 661-663.
- Lipkin, A. (1999). *Understanding homosexuality, changing schools: A text for teachers, counselors, and administrators*. Boulder, CO: Westview Press.
- Lively, Scott (2009). *Redeeming the rainbow: A Christian response to the “Gay” agenda*. Springfield, MA: Veritas Aeterna Press.

- Luhtanen, R. & Cocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302-318.
- Lyubomirsky, S., Tucker, K., Coldwell, N. & Berg, K. (1999). Why ruminators are poor problem solvers: Clues from the phenomenology of dysphoric rumination. *Journal of Personality and Social Psychology*, 77, 1041-1060.
- Major, B. & O'Brien, L. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393-421.
- Malterud, K. (2004). Health needs of women who have sex with women: Methodological assumptions underlying conclusions should have been questioned. *British Medical Journal*, 328, 463-464.
- Malterud, K., Bjorkman, M., Flatval, M., Ohnstad, A., Thesen, J. & Rortveit, G. (2009). Epidemiological research on marginalized groups implies major validity challenges: Lesbian health as an example. *Journal of Clinical Epidemiology*, 62, 703-710.
- Martin, A. D., & Hetrick, E. S. (1988). The stigmatization of the gay and lesbian adolescent. *Journal of Homo- sexuality*, 15, 163-183.
- Martin, J., Tuch, S. & Roman, P. (2003). Problem drinking patterns among African Americans: The impacts of reports of discrimination, perceptions of prejudice, and "risky" coping strategies. *Journal of Health and Social Behavior*, 44, 408-425.
- Mays, V. & Cochran, S. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health*, 91, 1869-1876.

- Mays, V., Cochran, S. & Barnes, N. (2007). Race, race-based discrimination, and health outcomes among African Americans. *Annual Review of Psychology*, 58, 201-225.
- McConnell, A. & Leibold, J. (2001). Relations between the Implicit Association Test, explicit racial attitudes, and discriminatory behavior. *Journal of Experimental Social Psychology*, 37, 435-442.
- McDaniel, J. S., Purcell, D. & D'Augelli, A. R. (2001). The relationship between sexual orientation and risk for suicide: Research findings and future directions for research and prevention. *Suicide and Life-threatening Behavior*, 31(Supplement), 84-105.
- McConahay, J., Hardee, B. & Batts, V. (1981). Has racism declined? It depends on who's asking and what is asked. *Journal of Conflict Resolution*, 25, 563-579.
- McKirnan, D. & Peterson, P. (1988). Stress, expectancies, and vulnerability to substance abuse: A test of a model among homosexual men. *Journal of Abnormal Psychology*, 97, 461-466.
- McSwan, K. (2000). The impact of sexism on older women's mental and physical health. *Dissertation Abstracts International*, 61, 3323.
- Mendoza-Denton, R., Downey, G., Purdie, V., Davis, A. & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implication for African-American students' college experience. *Journal of Personality and Social Psychology*, 83, 896-918.
- Mendes-Leite, R. & de Busscher, P. (Ed.). (1993). *Gay studies from the French cultures: Voices from France, Belgium, Brazil, Canada and the Netherlands*. New York: Haworth Press.

- Meyer, I. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36, 38-56.
- Meyer, I. (2003). Prejudice, social stress, and mental health in lesbian, gay and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697.
- Meyer, I. & Dean, L. (1998). Internalized homophobia, intimacy, and sexual behavior among gay and bisexual men. G. M. Herek (Ed.), *Stigma and Sexual Orientation* (pp. 160-186), Newbury Park, CA: Sage.
- Milburn, N., Ayala, G., Batterham, P. & Rotheram-Borus, M. (2006). Discrimination and exiting homelessness among homeless adolescents. *Cultural Diversity & Ethnic Minority Psychology*, 12, 658-672.
- Miranda, J. & Storms, M. (1989). Psychological adjustment of lesbians and gay men. *Journal of Counseling & Development*, 68, 41-45.
- Mohy-ud-din, Atta (1968). *Abu Bakr*. Delhi: S. Chand.
- Monteith, M. (1993). Self-regulation of prejudiced responses: Implications for progress in prejudice-reduction efforts. *Journal of Personality and Social Psychology*, 65, 469-485.
- Morrison, M. & Morrison, T. (2002). Development and validation of a scale measuring modern prejudice toward gay men and lesbian women. *Journal of Homosexuality*, 43, 15-37.
- Morrison, T, Parriag, A. & Morrison, M. (1999). The psychometric properties of the Homonegativity Scale. *Journal of Homosexuality*, 37, 107-122.

- Murdock, T. & Bolch, M. (2005). Risk and protective factors for poor school adjustment in lesbian, gay, and bisexual (LGB) high school youth: Variable and Person-centered analyses. *Psychology in the School, 42*, 159-172.
- Mustanski, B., Garofalo, R. & Emerson, E. (2010). Mental health disorder, psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. *American Journal of Public Health, 100*, 2426-2432.
- Nadal, K. (2008). Preventing racial, ethnic, gender, sexual minority, disability, and religious microaggressions: Recommendations for promoting positive mental health. *Prevention in Counseling Psychology: Theory, Research, Practice and Training, 2*, 22-27.
- Nadal, K., Wong, Y., Issa, M., Meterko, V., Leon, J. & Wideman, M. (2011). Sexual orientation microaggressions: Processes and coping mechanisms for lesbian, gay, and bisexual individuals. *Journal of LGBT Issues in Counseling, 5*, 1-26.
- Nadler, A., Malloy, T & Fisher, J. (Ed.). (2008). *The social psychology of intergroup reconciliation*. New York: Oxford University Press.
- National Archives, 2012. Teaching with documents: The Civil Rights Act of 1964 and the Equal Employment Opportunity Commission. Retrieved from <http://www.archives.gov/education/lessons/civil-rights-act/>
- National Network of Runaway and Youth Services. (1985). *To whom do they belong? A profile of America's runaway and homeless youth and the programs that help them*. Washington, DC: National Network of Runaway and Youth Services.

- Negy, C. & Eisenman, R. (2005). A comparison of African American and White college students' affective and attitudinal reactions to lesbian, gay, and bisexual individuals: An exploratory study. *Journal of Sex Research, 42*, 291-298.
- Newport, Frank (2011, February). American split on desired influence of organized religion. Retrieved from Gallup poll website:  
<http://www.gallup.com/poll/145916/americans-split-desired-influence-organized-religion.aspx>
- Newport, Frank (2012, February). Mississippi is most religious U. S. state. Retrieved from Gallup poll website: <http://www.gallup.com/poll/153479/mississippi-religious-state.aspx#1>
- Neufeldt, V. & Guranlnik, D. (Ed). (1988). *Websters new world dictionary* (3<sup>rd</sup> edition). Cleveland & New York: Webster's New World.
- Nosek, B. & Banaji, M. (2001). The go/no-go association task. *Social Cognition, 19*, 625-666.
- Norsek, B., Greenwald, A., & Banaji, M. (2007). The Implicit Association Test at age 7: A methodological and conceptual review (Pp. 265-292). In J. A. Bargh (Ed.), *Automatic processes in social thinking and behavior*. Psychology Press.
- Nosek, B. A. & Smyth, F. L. (2007). A multitrait-multimethod validation of the Implicit Association Test: Implicit and explicit attitudes are related but distinct constructs. *Experimental Psychology, 54*, 14-29.
- Nungesser, L. (1983). *Homosexual acts, actors and identities*. New York: Praeger.
- O'Shaughnessy, M., Russell, S. T., Heck, K., Calhoun, C., & Laub, C. (2004). *Safe place to learn: Consequences of harassment based on actual or perceived sexual*

*orientation and gender non-conformity and steps for making schools safer*. San Francisco: California Safe Schools Coalition and 4-H Center for Youth Development.

- Olson, M. & Fazio, R. (2009). Implicit and explicit measures of attitudes: The perspective of the mode model. In R. E. Petty, R. H. Fazio, & P. Brin~ol (Eds.), *Attitudes: Insights from the new implicit measures* (19-63). New York: Psychology Press.
- Owens, R. E. (1998). *Queer kids: The challenges and promise for lesbian, gay, and bisexual youth*. New York: Hawthorne Press.
- Pachankis, J. (2008). The psychological implications of concealing a stigma: A cognitive-affective-behavioral model. *Psychological Bulletin*, *133*, 328-345.
- Paradies, Y. (2006). A systematic review of empirical research on self-reported racism and health. *International Journal of Epidemiology*, *35*, 888-901.
- Park, C., Armeli, S. & Tennen, H. (2004). The daily stress and coping process and alcohol use among college students. *Journal of Studies on Alcohol*, *65*, 126-135.
- Pascoe, E. & Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, *135*, 531-554.
- Pearlin, L. (1999). Stress and mental health: A conceptual overview. In A. V. Horwitz & T. L. Scheid (Eds.), *A handbook for the study of mental health* (pp. 161-175). New York: Cambridge University Press.
- Perez-Koenig, R. & Rock, B. (Ed.). (2001). *Social work in the era of devolution: Toward a just practice*. New York: Fordham University Press.

- Peters, A. J. (2003). Isolation or inclusion: Creating safe spaces for lesbian and gay youth. *Families in Society*, 84, 331–337.
- Phelps, E., O’Conner, K., Cunningham, W., Funayama, E., Gatenby, J. & Gore, J. (2000). Performance on indirect measures of race evaluation predicts amygdale activation. *Journal of Cognitive Neuroscience*, 12, 729-738.
- Pierce, C., Carew, J., Pierce-Gonzalez, D. & Willis, D. (1977). An experiment in racism: TV commercials. *Education and Urban Society*, 10, 61-87.
- Plant, E. & Devine, P. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 811-832.
- Plant, E.; Devine, P & Brazy, P. (2003). The bogus pipeline and motivations to respond without prejudice: Revisiting the fading and faking of racial prejudice. *Group Processes & Intergroup Relations*, 6, 187-200.
- Ploderl, M. & Fartacek, R. (2005). Suicidality and associated risk factors among lesbian, gay, and bisexual compared to heterosexual Austrian adults. *Suicide and Life Threatening Behavior*, 35, 661-670.
- Plugge-Foust, C & Stickland, G. (2001). Homophobia, irrationality, and Christian ideology: Does a relationship exist? *Journal of Sex Education and Therapy*, 25, 240 -244.
- Poplin, M. & Weeres, J. (1994). Voices from the inside: A report on schooling from inside the classroom. Claremont, CA: Institute for Education in Transformation at the Claremont Graduate School.

- Pratto, R., Sidanius, J., Stallworth, L. & Malle, B. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741-763.
- Pynes, Wayne (1987). *Homosexuality: A research guide*. New York: Garland Publication.
- Pyszczynski, T. & Greenberg, J. (1986). Persistent high self-focus after failure and lower self-focus after success: The depressive self-focusing style. *Journal of Personality and Social Psychology*, 50, 1039-1044.
- Pyszczynski, T. & Greenberg, J. (1987). Self-regulatory preservation and the depressive self-focusing style: A self-awareness theory of reactive depression. *Psychological Bulletin*, 102, 122-138.
- Radkowsky, M. & Siegel, L. (1997). The gay adolescent: Stressors, adaptations, and psychosocial interventions. *Clinical psychology Review*, 17, 191-216.
- Raja, S. & Stokes, J. (1998). Assessing attitudes toward lesbians and gay men: The Modern Homophobia Scale. *Journal of Gay, Lesbian, and Bisexual Identity*, 3, 113-134.
- Remafedi, G. (1994a). Cognitive and behavioral adaptations to HIV/AIDS among gay and bisexual adolescents. *Journal of Adolescent Health*, 15, 142-148.
- Remafedi, G. (1994b). Predictors of unprotected intercourse among gay and bisexual youth: Knowledge, beliefs and behavior. *Pediatrics*, 94, 163-168.
- Reynolds, W. (1982). Development of reliable and valid short-forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical psychology*, 38, 119-125.

- Robbins, G., Powers, D. & Burgess, S. (2005). *A wellness way of life* (6<sup>th</sup> ed.). New York: McGraw-Hill.
- Rohner, J. & Bjorklund, F. (2006). Do self-presentation concerns moderate the relationship between implicit and explicit Homonegativity measures? *Scandinavian Journal of Psychology*, *47*, 379-385.
- Rosario, M., Hunter, J. & Gwadz. M. (1997). Exploration of substance use among lesbian, gay, and bisexual youth: Prevalence and correlates. *Journal of Adolescent Research*, *12*, 454-476.
- Rosik, C. H., Griffith, L. K., & Cruz, Z. (2007). Homophobia and conservative religion: Toward a more nuanced understanding. *Journal of Orthopsychiatry*, *77*, 10-19.
- Rotheram-Borus, M. & Koopman, C. (1991). Sexual risk behaviors, AIDS knowledge, and beliefs about AIDS among predominantly minority gay and bisexual male adolescents. *American Journal of Public Health*, *81*, 208-210.
- Rotheram-Borus, M., Rosario, M., Reid, H. & Koopman, C. (1995). Predicting patterns of sexual acts among homosexual and bisexual youths. *American Journal of Psychiatry*, *152*, 588-595.
- Russell, S. (2005). Beyond risk: Resilience in the lives of sexual minority youth. *Journal of Gay & Lesbian Issues in Education*, *2*, 5-18.
- Russell, S., Seif, H. & Truong, N. (2001). School outcomes of sexual minority youth in the United States: Evidence from a national study. *Journal of Adolescence*, *24*, 111-127.

- Ryan, A., Gee, G. & Griffith, D. (2008). The effects of perceived discrimination on diabetes management. *Journal of Health Care for the Poor and Underserved, 9*, 149-163.
- Ryan, R., Rigby, S. & King, K. (1993). Two types of religious internalization and their relations to religious orientation and mental health. *Journal of Personality and Social Psychology, 65*, 586-596.
- Ryan, C. & Rivers, I. (2003). Lesbian, gay, and bisexual and transgender youth: Victimization and its correlates in the USA and UK. *Culture, Health & Sexuality, 5*, 103–119.
- Saewyc, E. M., Skay, C., Reis, E., Resnick, M., Murphy, A. & Combs, L. (2006). Hazards of stigma: The sexual and physical abuse of gay, lesbian, and bisexual adolescents in the United States and Canada. *Child Welfare Journal, 85*, 195-214.
- Safren, S. & Heimberg, R. (1999). Depression, hopelessness, suicidality, and related factors in sexual minority and heterosexual adolescents. *Journal of Consulting and Clinical Psychology, 67*, 859-866.
- Safren, S. A. & Rogers, T. (2001). Cognitive-behavioral therapy with gay, lesbian, and bisexual clients. *Journal of Clinical Psychology, 57*, 629–643.
- Sandfort, T., de Graaf, R., Bijl, R. & Schnabel, P. (2001). Same-sex sexual behavior and psychiatric disorders: Finding from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Archives of General Psychiatry, 58*, 85-91.
- Savin-Williams, R. (1990). *Gay and lesbian youth: Expressions of identity*. New York: Hemisphere Publishing Corporation.

- Savin-Williams, R. (1994). Verbal and physical abuse as stressors in the lives of lesbian, gay male, and bisexual youths: Associations with school problems, running away, substance abuse, prostitution, and suicide. *Journal of Consulting and Clinical Psychology, 62*, 261-269.
- Savin-Williams, R. (1998). The disclosure to families of same-sex attractions by lesbian, gay, and bisexual youths. *Journal of Research on Adolescence, 8*, 149-168.
- Savin-Williams, R. & Lenhart, R. (1990). *AIDS prevention among gay and lesbian youth: Psychosocial stress and health care intervention guidelines*. D. G. Ostrow (pp. 75-99), New York, NY: Plenum Press.
- Scheier, M. & Carver, C. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology, 4*, 219-247.
- Schellenberg, E., Hirt, J. & Sears, A. (1999). Attitudes toward homosexual among students at a Canadian university. *Sex Roles, 40*, 139-152.
- Schmukle, S. & Egloff, B. (2004). Does the Implicit Association Test for assessing anxiety measures trait and state variance? *European Journal of Personality, 18*, 483-494.
- Schuette, R. & Fazio, R. (1995). Attitude accessibility and motivation as determinants of biased processing: A test of the MODE model. *Personality and Social Psychology Bulletin, 21*, 704-710.
- Sean, C., Maralee, M. & Chenneville, T. (2012). Destabilizing anti-gay environments through Gay-Straight Alliances: Possibilities and limitations through shifting discourse. *Clearing House, 85*, 56 – 60.

- Seise, J., Banse, R. & Neyer, E. (2002). Individuelle Unterschiede in impliziten und expliziten Einstellungen zur Homosexualität [Individual differences in implicit and explicit attitudes towards homosexuality]. *Zeitschrift für Sexualforschung*, 15, 21-42.
- Sekaquaptewa, D., Espinoza, P., Thompson, M., Vargas, P. & Hoppel, W. von (2002). Stereotypic explanatory bias: Implicit stereotyping as a predictor of discrimination. *Journal of Experimental Social Psychology*, 39, 75-85.
- Sellers, R., Smith, M., Shelton, J., Rowley, S. & Chavous, T. (1998). Multidimensional Model of Racial Identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review*, 2, 18-39.
- Sheehan, Kim (2001). E-mail survey response rates: A review. *Journal of Computer-Mediated Communication*, 6. Retrieved from file:///Volumes/Y/Dissertation%20Proposal/E-mail%20Survey%20Response%20Rates%EF%80%A2%A%20Review%20-%20Sheehan%20-%202006%20-%20Journal%20of%20Computer-Mediated%20Communication.webarchive.
- Sinclair, L. & Kunda, Z. (1999). Reactions to a black professional: Motivated inhibition and activation of conflicting stereotypes. *Journal of Personality and Social Psychology*, 77, 885-904.
- Smith, S., Dermer, S. & Agramovich, R. (2005). Working with nonheterosexual youth to understand sexual identity development, at-risk behaviors, and implication for health care professionals. *Psychological Reports*, 96, 651-654.

- Solarz, A. (1999). *Lesbian health: Current assessment and directions for the future*. Institute of Medicine (U.S.). Washington, D.C.: Committee on Lesbian Health Research Priorities, National Academy Press.
- Son Hing, L., Li, W. & Zanna, M. (2002). Inducing hypocrisy to reduce prejudicial responses among aversive racists. *Journal of Experimental Social Psychology*, 38, 71-78.
- South Carolina Legislature (2012). Session 119 (2011 – 2012), S 0566, general bill. Retrieved from <http://www.scstatehouse.gov/billsearch.php?billnumbers=566&session=119&summary=B>
- South Carolina State Department of Education (2011). 2011 state report card, fact file. Retrieved from <http://ed.sc.gov/data/report-cards/2011/index.cfm>
- Spence, J. & Hahn, E. (1997). The Attitudes Toward Women Scale and attitude change in college students. *Psychology of Women Quarterly*, 21, 17-34.
- Spence, J., Helmreich, R. & Stapp, J. (1973). A short version of the Attitudes Toward Women Scale (AWS). *Bulletin of the Psychonomic Society*, 2, 219-220.
- Spirito, A. & Esposito-Smythers, C. (2006). Attempted and completed suicide in adolescence. *Annual Review of Clinical Psychology*, 2, 237-266.
- Steffens, M. (2005). Implicit and explicit attitudes towards lesbians and gay men. *Journal of Homosexuality*, 49, 39-66.
- Steffens, M. & Buchner, A. (2003). Implicit Association Test: Separating transsituationally stable and variable components of attitudes toward gay men. *Experimental Psychology*, 50, 33-48.

- Swearer, S.M., Turner, R.K., Givens, J.E., & Pollack, W.S. (2008). "You're So Gay!": Do different forms of bullying matter for adolescent males? *School Psychology Review, 37*, 160-173.
- Szalacha, L. A. (2003). Safer sexual diversity climates: Lessons learned from an evaluation of Massachusetts safe schools program for gay and lesbian students. *American Journal of Education, 110*, 58-88.
- Tenner, A., Trevithick, L., Wagner, V. & Burch, R. (1998). Seattle Youth Care's prevention, intervention and education program: A model of care for HIV-positive, homeless, and at-risk youth. *Journal of Adolescent Health, 23*, 96-106.
- Thompson, E. & Pleck, J. (1986). The structure of male role norms. *American Behavioral Scientist, 29*, 531-543.
- Tougas, F., Brown, R., Beaton, A. & Joly, S. (1995). Neosexism: Plus ca change, plus c'est pareil. *Personality and Social Psychology Bulletin, 21*, 842-850.
- United States Bureau of Labor and Statistics. (2011). *South Carolina State Occupation Employment and Wage Estimates*. Retrieved from [http://www.bls.gov/oes/current/oes\\_sc.htm](http://www.bls.gov/oes/current/oes_sc.htm).
- Vanman E., Paul, B., Ito, T. & Miller, N. (1997). The modern face of prejudice and structural features that moderate the effect of cooperation on affect. *Journal of Personality and Social Psychology, 73*, 941-959.
- Vinnerljung, B., Borcyskowski, A. von, Hjern, A. & Lindblad, F. (2006). Suicidal behaviour in national and international adult adoptees: A Swedish cohort study. *Social Psychiatry and Psychiatric Epistemology, 41*, 95-102.

- Wagner, G., Brondolo, E. & Rabkin, J. (1996). Internalize homophobia in sample of HIV + gay men and its relationship to psychological distress, coping and illness progression. *Journal of Homosexuality*, 32, 91-106.
- Wagstaff, G. & Quirk, M. (1983). Attitudes to sex-roles, political conservatism, and belief in a just world. *Psychological Reports*, 52, 813-814.
- Waldo, C. (1999). Working in a majority context: A structural model of heterosexism as minority stress in the workplace. *Journal of Counseling Psychology*, 46, 218-232.
- Waldo, C. & Kemp, J. (1997). Should I come out to my students? An empirical investigation. *Journal of Homosexuality*, 34, 79-94.
- Walls, N., Freedenthal, S. & Wisneski, H. (2008). Suicidal ideation and attempts among sexual minority youths receiving social services. *Social Work*, 53, 21-29.
- Walls, N., Hancock, P. & Wisneski, H. (2007). Differentiating the social service needs of homeless sexual minority youths from those of non-homeless sexual minority youths. *Journal of Children & Poverty*, 13, 177-205.
- Walls, N. E., Kane, S. B. & Wisneski, H. (2010). Gay-straight alliances and school experiences of sexual minority youth. *Youth & Society*, 41, 307-332.
- Walters, K. L. & Simoni, J. (1993). Lesbian and gay male group identity attitudes and self-esteem: Implications for counseling. *Journal of Counseling Psychology*, 40, 94-99.
- Weinberg, M. & Williams, C. (1974). *Male homosexuals: Their problems and adaptations*. New York, NY: Oxford University Press.

- Whitbeck, L. B., Chen, X., Hoyt, D., Tyler, K. & Johnson, K. (2004). Mental disorder, subsistence strategies, and victimization among gay, lesbian, and bisexual homeless and runaway adolescents. *Journal of Sex Research, 41*, 329-342.
- Whitley, B. & Lee, S. (2000). The relationship of authoritarianism and related constructs to attitudes toward homosexuality. *Journal of Applied Social Psychology, 30*, 144-170.
- Williams, G., Grow, V., Freedman, Z., Ryan, R. & Deci, E. (1996). Motivational predictors of weight loss and weight-loss maintenance. *Journal of Personality and Social Psychology, 70*, 115-126.
- Williams, D., Neighbors, H. & Jackson, J. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health, 93*, 200-208.
- Williams, G., Rodin, G., Ryan, R., Grolnick, W. & Deci, E. (1998). Autonomous regulation and long-term medication adherence in adult outpatients. *Health Psychology, 17*, 269-276.
- Willoughby, B., Doty, N. & Malik, N. (2010). Victimization, family rejection, and outcomes of gay, lesbian, and bisexual youth people: The role of negative GLB identity. *Journal of GLBT Family Studies, 6*, 403-424.
- Winters, K., Remafedi, G. & Chan, B. (1996). Assessing drug abuse among gay-bisexual young men. *Psychology of Addictive Behaviors, 10*, 228-238.
- Witten, T. & Eyler, E. (Ed.). (2012). *Gay, lesbian, bisexual aging: Challenges in research, practice, and policy*. Baltimore: John Hopkins University Press.
- Wright, L., Adams, E. & Bernat, J. (1999). Development and validation of the

homophobic scale. *Journal of Psychopathology and Behavioral Assessment*, 21, 337-347.

Wright, L., Adams, E. & Bernat, J. (1999). Development and validation of the homophobic scale. *Journal of Psychopathology and Behavioral Assessment*, 21, 337-347.

Wylie, L. & Forest, J. (1992). Religious fundamentalism, right-wing authoritarianism and prejudice. *Psychological Report*, 71, 1291-1298.

Yen, L., Ragland, D., Grenier, B. & Fisher, J. (1999). Workplace discrimination and alcohol consumption: Findings from the San Francisco Muni Health and Safety Study. *Ethnicity & Disease*, 9, 70-80.

Yoshikawa, H., Wilson, P., Chae, D. & Cheng, J. (2004). Do family and friendship networks protect against the influence of discrimination on mental health and HIV risk among Asian and Pacific Islander gay men? *AIDS Education and Prevention*, 16, 84-100.

Ziyadeh, N., Prokop, L., Fisher, L., Rosario, M., Field, A., Camargo, C., et al. (2007). Sexual orientation, gender, and alcohol use in a cohort study of U.S. adolescent girls and boys. *Drug and Alcohol Dependence*, 87, 119-130.

## APPENDICES

## Appendix A

## Chart of Student's Experience with Bullying Nationally and in Different States

(Black represents information from 2005 and red for 2009)

(Harris Interactive &amp; GLSEN, 2005; Kosciw, Greytak, Diaz &amp; Bartkiewicz, 2010)

Variables 2005/2009	National (%)	Georgia (%)	North Carolina (%)
Percentage of students that believed their schools had a club addressing LGBT student issues	22%/45%	9%/22%	8%/28%
Percentage of students that believed their schools had safe school policies that included sexual orientation and gender identity/expression	48%/18%	51%/12%	44%/9%

## Appendix B

## Chart of Student's Experience with Bullying Nationally and in Different States

(Harris Interactive and GLSEN, 2005)

Variable	National (%)	Georgia (%)	North Carolina (%)
Percentage of students that believed their schools had a club addressing LGBT student issues	22%	9%	8%
Percentage of students that believed their schools had safe school policies that included sexual orientation and gender identity/expression	48%	51%	44%
Percentage of students that heard teachers make homophobic remark	15%	18%	17%
Percentage of students that believed teachers frequently intervened when they heard other students make homophobic remarks	33%	23%	38%
Percentage of students that reported bullying was a serious problem in school	36%	49%	48%
Percentage of students that reported that They felt very safe	47%	34%	38%
Percentage of students that were harassed or assaulted in school but did not tell a school Staff person because they either thought it Would make the situation worse or that the Staff would not take action to resolve it	10%	54%	42%

## Appendix C

## Chart of Student's Experience with Bullying Nationally

(Harris Interactive &amp; GLSEN, 2005; Kosciw, Greytak, Diaz &amp; Bartkiewicz, 2010)

Variable	National 2005	National 2009
Percentage of students that believed their schools had a club addressing LGBT student issues	22%	45%
Percentage of students that believed their schools had safe school policies that included sexual orientation and gender identity/expression	48%	18%
Percentage of students that heard teachers make homophobic remark	15%	60%
Percentage of students that believed teachers frequently intervened when they heard other students make homophobic remarks	33%	15%
Percentage of LGBT students that do not feel safe in school	20%	61%

## Appendix D

Breakdown of Regions within the United States that Self-identify as Fundamentalist

(Barton, 2010)

Region of the United States	Individuals who self-identify as Fundamentalist (%)
East South Central	62.5*
South Atlantic	49.7*
West South Central	45.5*
West North Central	28
Mountain	26.7
Pacific	18.6
Middle Atlantic	12.5
New England	11

\*Bible Belt region



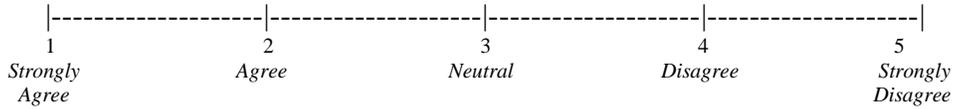


Appendix E2

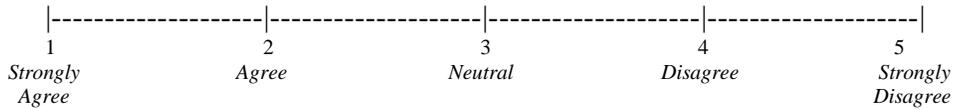
The Modern Homonegativity Scale-Gay Lesbians

Please read each question and circle the number that best represents your beliefs.

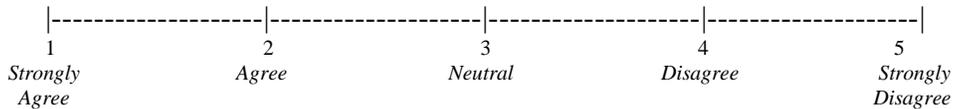
**1. Many lesbians use their sexual orientation so that they can obtain special privileges.**



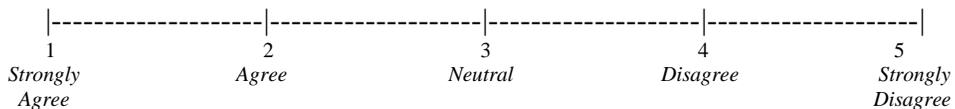
**2. Lesbians seem to focus on the ways in which they differ from heterosexuals, and ignore the ways in which they are the same.**



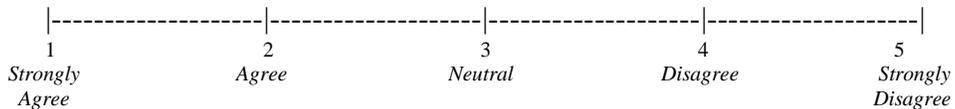
**3. Lesbians do not have all the rights they need.**



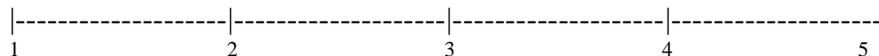
**4. The notion of universities providing students with undergraduate degrees in Gay and Lesbians Studies is ridiculous.**



**5. Celebrations such as “Gay Pride Day” are ridiculous because they assume that an individual’s sexual orientation should constitute a source of pride.**

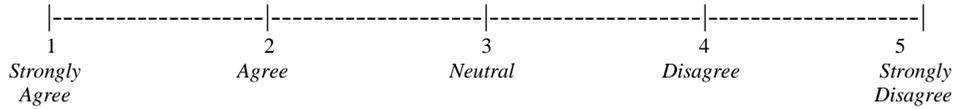


**6. Lesbians still need to protest for equal rights.**

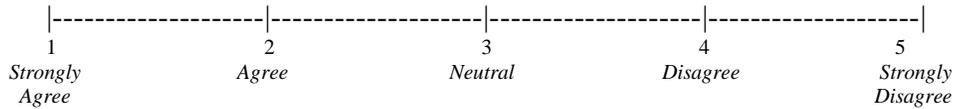


*Strongly Agree*                      *Agree*                      *Neutral*                      *Disagree*                      *Strongly Disagree*

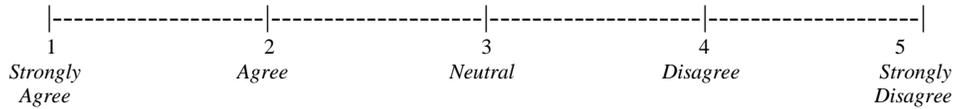
**7. Lesbians should stop shoving their lifestyle down other people’s throats.**



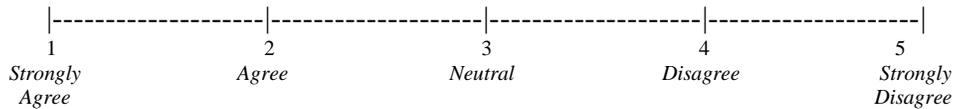
**8. If lesbians want to be treated like everyone else, then they need to stop making such a fuss about their sexuality/culture.**



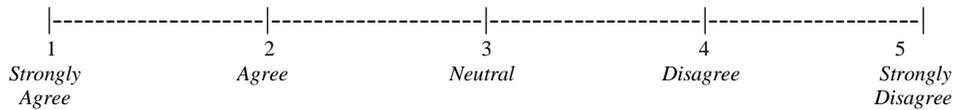
**9. Lesbians who are “out of the closet” should be admired for their courage.**



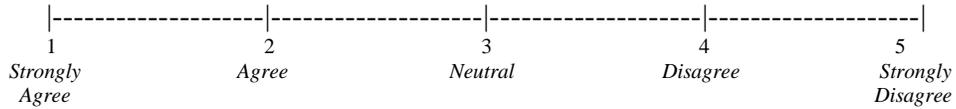
**10. Lesbians should stop complaining about the way they are treated in society, and simply get on with their lives.**



**11. In today’s tough economic times, tax dollars shouldn’t be used to support lesbian organizations.**



**12. Lesbians have become too confrontational in their demand for equal rights.**



*\*Items 3, 6, 9 are reverse scored*

## Appendix F

## Instructions for the IAT

(Instruction page 1)

Please review words associated with the categories of heterosexuality, homosexuality, good and bad.

Heterosexual: straight, heterosexual person, non-gay, man/woman, heterosexuality, opposite-sex attraction, heterosexual, and hetero

Homosexual: gay, homosexuality, same-sex attraction, lesbian, queer, homosexual person, homo, homosexual

Good: good, honest, respectable, ethical, moral, principled, right-minded, and honorable

Bad: bad, immoral, corrupt, disgraceful, perverse, shameful, dishonest, and unethical

(Instruction page 2)

Homosexual

Heterosexual

Put your middle or index finger on the E and I keys of your keyboard. Words representing the categories at the top will appear one-by-one in the middle of the screen. When the item belongs to a category on the left, press the E key; when the item belongs to a category on the right, press the I key. Items belong to only one category. If you make an error, an X will appear – fix the error by hitting the other key.

This is a timed sorting task. GO AS FAST AS YOU CAN while making as few mistakes as possible, going to slow or making too many errors will result in an un-interpretable score. This task will take about 5 minutes to complete.

Press the SPACE BAR to begin

(Instruction page 3)

The first task has the word homosexual (in white with a black background) in the right upper hand corner and the work heterosexual (again in white with a black background) in the left upper hand corner. The terms representing the words of homosexual and heterosexual are alternated one at a time in the middle of the screen in the color white and the subject must press the E or I key that corresponds to the words of homosexual or heterosexual.

(Instruction page 4)

Good

Bad

See above, the categories have changed. The items for sorting have changed as well. The rules, however, are the same.

When the item belongs to a category on the left, press the E key; when the item belongs to a category on the right, press the I key. Items belong to only one category. An X appears after an error- fix the error by hitting the other key. Go As FAST AS YOU CAN.

Press the SPACE BAR to begin

(Instruction page 5)

The first task has the word good (in a bright green color with a black background) in the right upper hand corner and the word bad (again in a bright green color with a black background) in the left upper hand corner. The terms representing the words of good and bad are alternated one at a time in the middle of the screen in the color green and the subject must press the E or I key that corresponds to the words of good and bad.

(Instruction page 6)

Homosexual  
Or  
Good

Heterosexual  
or  
Bad

See above, the four categories you saw separately now appear together. Remember, each item belongs to only one group. For example, if the categories flower and good appeared on the separate sides above – words meaning flower would go in the flower category, not the good category.

The green and white labels and items may help to identify the appropriate categories. Use the E and I keys to categorize items into four groups left and right, and correct errors by hitting the other key.

Press the SPACE BAR to begin

(Instruction page 7)

Heterosexual

Homosexual

Notice above, there are only two categories and they have switched positions. The concept that was on the right is now on the left. Practice this new configuration.

Use the E and I keys to categorize items left and right, and correct errors by hitting the other key.

Press the SPACE BAR to begin

(Instruction page 8)

Heterosexual  
or  
Good

Homosexual  
or  
Bad

See above, the four categories now appear together in a new configuration. Remember, each item belongs to only one group.

The green and white labels and items may help to identify the appropriate categories. Use the E and I keys to categorize items into the four groups left and right, and correct errors by hitting the other key.

Press the SPACE BAR to begin

---

(Conclusion page)

Your IAT score was “?”, which suggest a slight automatic preference for “?” compared to “?”.

Click on the link below to go to your next task

## Appendix G

## Internal and External Motivation to Respond Without Prejudice Scale (IMS and EMS)

Instructions: The following questions concern various reasons or motivations people might have for trying to respond in nonprejudicial ways. Please fill out completely and answer each question openly and honestly.

1. Because of today's PC (politically correct) standards I try to appear nonprejudiced toward homosexuals.

1	2	3	4	5	6	7	8	9
Strongly Disagree		Disagree		Neither Agree or Disagree		Agree		Strongly Agree

2. I try to hide any negative thoughts about homosexual people in order to avoid negative reactions from others.

1	2	3	4	5	6	7	8	9
Strongly Disagree		Disagree		Neither Agree or Disagree		Agree		Strongly Agree

3. If I acted prejudiced toward homosexual people, I would be concerned that others would be angry with me.

1	2	3	4	5	6	7	8	9
Strongly Disagree		Disagree		Neither Agree or Disagree		Agree		Strongly Agree

4. I attempt to appear nonprejudiced toward homosexual people in order to avoid disapproval from others.

1	2	3	4	5	6	7	8	9
Strongly Disagree		Disagree		Neither Agree or Disagree		Agree		Strongly Agree

5. I try to act nonprejudiced toward homosexual people because of pressure from others.

1	2	3	4	5	6	7	8	9
Strongly		Disagree		Neither		Agree		Strongly



## Appendix H

## Demographics

*Sexual orientation identification*

Sexual orientation identification is categorized as heterosexual/straight, bisexual, homosexual/gay/lesbian, unsure/questioning.

*Gender*

Gender is categorized as male, transgender (male to female), transgender (female to male), female.

*Age*

Age is categorized as 20 and under, 21-30, 31-40, 41-50, 51-60, 61 and over.

*Race/Ethnicity*

Race/ethnicity is categorized as African American/Black, Asian American/Asian/ Pacific Islander, Caucasian/European-American/White, Latino(a)/Hispanic/Puerto Rican, American Indian/Native American, Bi-racial, or other.

*Education level*

Education level categorized as Bachelor's degree, Master's degree, or Doctorate degree.

*Frequency of religious service attendance*

The frequency of religious service attendance is categorized as never, holidays mainly, once a month, several times a month, or once a week or more.

*Political Outlook*

Political outlook was categorized as Very Liberal, Moderately Liberal, Slightly Liberal, Neither Liberal nor Conservative, Slightly Conservative, Moderately Conservative, or Very Conservative.

*Political Affiliation*

Political affiliation was categorized as Strongly Democratic, Moderately Democratic, Slightly Democratic, Neither Democratic nor Republican, Slightly Republican, Moderately Republican, or Strongly Republican.

## Appendix I

## Questions about Teacher's School

Do you know anyone who is gay, lesbian, or bisexual?

- 1.) Gay (yes/yes a coworker/yes a student at my school/yes I am/no)
- 2.) Lesbian (yes/yes a coworker/yes a student at my school/yes I am/no)
- 3.) Bisexual (yes/yes a coworker/yes a student at my school/yes I am/no)

How safe do you think the following students would feel at the school where you teach?

- 4.) Gay (very/somewhat safe/not very safe/not at all safe)
- 5.) Lesbian (very/somewhat safe/not very safe/not at all safe)
- 6.) Male teen who acted feminine (very/somewhat safe/not very safe/not at all safe)
- 7.) Female teen who acted masculine (very/somewhat safe/not very safe/not at all safe)

How much do you agree or disagree with the following statement? (Likert scale)

- 8.) Teachers and other school personnel have an obligation to ensure a safe and supportive learning environment for gay, lesbian, and bisexual students.  
(strongly agree/ somewhat agree/ somewhat disagree/ strongly disagree)

Answer the following questions:

- 9.) Does your school have a Gay/Straight Alliance or another type of club that addresses lesbian, gay, or bisexual student issues in a positive and affirming way?  
(yes/no/not sure)

10.) Does your school have an anti-harassment and/or anti-discrimination policy?

(yes/no/not sure)

11.) Does your school have an anti-harassment and/or anti-discrimination policy that

specifically protects individuals' sexual orientation, whether it is homosexual, bisexual or heterosexual? (yes/no/not sure)

12.) Have you, as a teacher or as part of your training, had sensitivity training or

diversity training that supports and accepts gay, lesbian, bi-sexual youth?

(yes/no/not sure)

How helpful would the following effort be in creating safer schools for lesbian, gay, or bisexual students?

13.) Teacher sensitivity training (extremely helpful/very helpful/helpful/somewhat helpful/not helpful)

14.) Anti-harassment and anti-discrimination policies (extremely helpful/very helpful/helpful/somewhat helpful/not helpful)

15.) Allowing clubs on school campus that promote tolerance (extremely helpful/very helpful/helpful/somewhat helpful/not helpful)

16.) Have a principle or superintendent more openly address safety issues (extremely helpful/very helpful/helpful/somewhat helpful/not helpful)

## APPENDIX J

## Morrison &amp; Morrison, 2002; Study 2

## Intercorrelations Among Measures Used in Study 2 (N = 308)

	1.	2.	3.	4.	5.
1. MHS	.41**	.57**	-.03	.59**	
2. ATWS	.32**		.51**	-.29**	.63**
3. HS	.56**	.52**		-.23**	.39**
4. MC-SDS	.03	.11	-.09		-.23**
5. NS		.57**	.52**	.45**	.06

Note: \*\*  $p < .01$

Intercorrelations above the diagonal are for male participants (n = 148); Intercorrelations below the diagonal are for female participants (n = 160)

## Appendix K

University of Pennsylvania

## Information and Implied Consent about this Study

Dear Voluntary Participant,

This study hopes to help researchers better understand school teachers' (grades 6<sup>th</sup> – 12<sup>th</sup>) thoughts and attitudes about the gay, lesbian and bisexual population. You were selected as a possible participant in this study because you are currently employed in South Carolina as a secondary school teacher.

If you decide to participate, you will be given instructions on how to complete one short task and a number of questions, all of which will take approximately 15 minutes. The mentioned task is a timed categorization assignment that is used only to examine reactions toward gay and lesbian individuals. It will take approximately 15 minutes to complete the needed information. The first 275 participants will be awarded a \$10 gift certificate. The study will be available for a two week time period.

After you complete the assignments a message will be sent to the researcher that identifies the e-mail addresses that have completed the study. A link will be sent by e-mail to you so that you can redeem a \$10 gift certificate from Amazon. Please allow the researcher 24 hours to e-mail the Amazon gift certificate. The gift certificate can be redeemed instantly and you will be able to buy iTunes, kindle books, and any other items available on Amazon.

All information will be kept confidential. No names, address, or phone numbers will be needed or desired. Only the co-investigator will see your e-mail address due to needing to send the gift certificate, but that information will be erased after that task is completed. All websites used in the study are secure with the use of a Secure Socket Layer (SSL) protocol that banks and other commercial websites use to transfer credit card information in an encrypted format. Information that is saved, which as mentioned before, does not include any identifying information, is password protected and only given to the co-investigator. This provides strong security for data transfer to and from our website.

You may stop at anytime by closing the study window. There is very little risk involved in this study but if you have any questions or if any stress is incurred due to filling out the survey please feel free to contact the principle investigator, Dr. Ram Cnaan. He can be reached at the University of Pennsylvania by calling 215-898-5523 or e-mailing to [cnaan@sp2.upenn.edu](mailto:cnaan@sp2.upenn.edu).

You continuing with the study is your implied consent that you understand the information provided, that you are 21 years of age or older, that you are currently employed in South Carolina as a school teacher (teaching any students grades 6-12) and that you willingly agree to participate.

Click this [LINK](#) to begin

Please help me acquire valuable and relevant knowledge which could benefit future teachers and students. Thank you for your time and help in this endeavor.

Sincerely,  
Chris Graham, LMSW  
Doctoral Candidate  
University of Pennsylvania

Appendix L

University of Pennsylvania

Thank you message placed on gift certificate

Thank you for taking the time to fill out this study and for helping us with this research endeavor.