

THE UNDERLYING STRUCTURE OF ATTITUDES
TOWARDS GAY AND LESBIAN YOUTH IN
PRE-SERVICE TEACHERS

By

KURT T. CHOATE

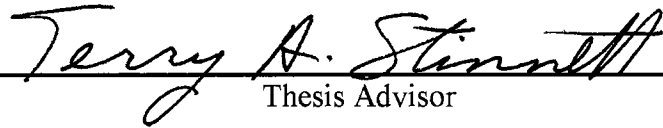
Bachelor of Science
University of Tulsa
Tulsa, Oklahoma
1991

Master of Education
Northeastern State University
Tahlequah, Oklahoma
1993

Submitted to the Faculty
of the Graduate College of
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
August, 2003

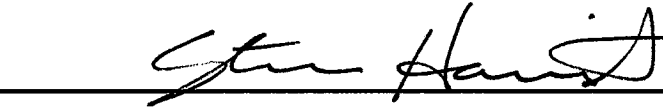
THE UNDERLYING STRUCTURE OF ATTITUDES
TOWARDS GAY AND LESBIAN YOUTH IN
PRE-SERVICE TEACHERS

Thesis Approved:



Thesis Advisor









Dean of the Graduate College

ACKNOWLEDGEMENTS

I'd like to thank my advisor, Terry A. Stinnett for all his support and encouragement during my graduate training and during the writing of this study. In addition, I would like to thank the other members of my dissertation committee, Judy Oehler-Stinnett, Kayte Perry and R. Steven Harrist for their input and recommendations. I would like to thank John Carlson, Ty Cruce, and the many graduate assistants at Oklahoma State University for helping to collect my data. In addition, I'd like to thank all of the instructors at Oklahoma State University for keeping me focused and on-task throughout my graduate training.

Words are difficult to find to help express my sincere appreciation to all the people who helped me achieve my educational goals. First and foremost, my most heartfelt thanks go to my family, without whose support I never would have made it this far: my parents, Doyle and Jo Ann Choate, my brother, M. Kent Choate, Ph.D., and his family. It's finally done! Next, I'd like to thank all my close friends, including Chris, Doug, and Shane, for their guidance, assistance, and encouragement. My deepest and most sincere appreciation go to each and every person who has touched my life and inspired me to be the best I can be.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
Background of the Problem.....	2
<i>The Mechanism of Prejudice and Discrimination</i>	3
<i>Correlates Underlying Discrimination</i>	4
Purpose and Significance of the Study.....	7
Research Questions.....	9
II. REVIEW OF THE LITERATURE.....	10
The Development of the Homosexual Individual.....	12
Labeling Bias.....	16
<i>Right Wing Authoritarianism</i>	19
<i>Social Dominance Orientation</i>	21
<i>Gender and Gender Stereotyping</i>	23
Structural Equation Modeling Methodology.....	26
<i>Structural Equation Model Hypothesized for Discrimination</i>	27
III. METHOD.....	31
Research Methods/Designs.....	31
Subjects.....	33
Data Collection.....	43
Measures.....	44
Research Questions Analyzed.....	47
Data Analysis.....	47
<i>Analysis of Variance</i>	47
<i>Structural Equation Modeling</i>	48
Limitations to the Study.....	48
IV. RESULTS.....	49
Means and Standard Deviations.....	49
Reliability Analysis.....	51
<i>Correlation and Internal Consistency</i>	51
<i>Construct Validity of the ETAH Scale</i>	53
Analysis of Variance.....	54
Structural Equation Modeling.....	57

Chapter	Page
V. SUMMARY, DISCUSSION, AND RECOMMENDATIONS.....	62
Summary.....	62
Limitations.....	66
Discussion.....	66
Recommendations.....	71
REFERENCES.....	73
APPENDIXES	
APPENDIX A – INSTITUTIONAL REVIEW BOARD APPROVAL.....	88
APPENDIX B – STANDARDIZED ADMINISTRATION PROCEDURES.....	90
APPENDIX C – PARTICIPANT CONSENT FORM.....	92
APPENDIX D – VIGNETTE TEMPLATE.....	94
APPENDIX E – EVALUATION OF TEACHERS’ ATTITUDES TOWARD HOMOSEXUALITY (ETAH) SCALE.....	96
APPENDIX F – DEMOGRAPHIC INFORMATION SHEET.....	100
APPENDIX G – RIGHT WING AUTHORITARIANISM (RWA) SCALE.....	103
APPENDIX H – SOCIAL DOMINANCE ORIENTATION (SDO) SCALE.....	108
APPENDIX I – RWA ITEM’S MEANS AND STANDARD DEVIATIONS.....	111
APPENDIX J – SDO ITEM’S MEANS AND STANDARD DEVIATIONS.....	116
APPENDIX K – BEM SEX-ROLE INVENTORY ITEM’S MEANS AND STANDARD DEVIATIONS.....	119
APPENDIX L – ETAH ITEM’S MEANS AND STANDARD DEVIATIONS.....	121
APPENDIX M – ETAH FACTOR LOADINGS AND SCREE PLOT OF THE FINAL EXTRACTION.....	124
APPENDIX N – COVARIANCE MATRIX OF INITIAL SEM.....	128

LIST OF TABLES

Table	Page
1. State of Subject University.....	33
2. Gender of Subjects.....	34
3. Age of Subjects.....	35
4. Ethnicity of Subjects.....	36
5. Relationship Status of Subjects.....	37
6. College Educational Level of Subjects.....	38
7. Location of Participant's High School Graduation.....	39
8. Anticipated Certification Level of Participants.....	40
9. Teacher Training Track for Participants.....	41
10. Responses to Supplemental Questions.....	42
11. Means and Standard Deviations of Right-Wing Authoritarianism Scale (RWA Scale), Social Dominance Orientation Scale (SDO Scale), Bem Sex Role Inventory (Bem), and the Evaluation of Teachers' Attitudes toward Homosexuality (ETAH).....	51
12. Reliability and Correlational Indices for the Right-Wing Authoritarianism Scale (RWA), the Social Dominance Orientation Scale (SDO), the Bem Sex Role Inventory (Bem), and the Evaluation of Teachers' Attitudes toward Homosexuality (ETAH).....	53
13. Means and Standard Deviations of the Subject Groups on the Evaluation of Teachers' Attitudes towards Homosexuality (ETAH) Scale.....	56
14. ANOVA Table to Test Ho1.....	57
15. Comparison of Models for SEM.....	60

LIST OF FIGURES

Figure	Page
1. Initial SEM Model.....	30
2. Distribution of Vignettes Among Subjects.....	55
3. Final SEM Model.....	61

CHAPTER 1

INTRODUCTION

School psychologists, as well as individuals directly or indirectly influencing the lives of children and their families, have been charged with creating and maintaining educational environments free from prejudice and tolerant of individual differences (American Psychological Association, 1993; Canter, Bennett, Jones, & Nagy, 1994). However, a recent study of 194 gay, lesbian, and bisexual youths, ages 15-21, from 14 cities around the United States indicated high frequencies of victimization on the basis of their sexual orientation, with most violence occurring in their educational setting (Pilkington & D'Augelli, 1995). Further investigation of similar studies revealed that a high number of teenagers and college students view the homosexual individual as a legitimate target for physical and/or verbal attacks (e.g., Franklin, 1998; Harry, 1989; Remafedi, 1987; Schaecher, 1988). The murder case of Mathew Shepard in Wyoming, the bombings of gay bars in London, and a host of other gay-related hate crimes resonate throughout the world headlines today. This increasing amount of violence in our society encourages further study for intervention into the contextual and social cues that permit this behavior to occur.

Background of the Problem

With the number of hate crimes against all minority groups increasing in American society today, especially within its public schools, it becomes clear that focus should be placed on the cause and prevention of such prejudices developing in children from the teachers and others that contribute to their educational environment. Teachers may hold negative attitudes toward students who have labels or behaviors indicative of homosexuality. This prejudice may extend into the teacher's perceptions of these students and, directly or indirectly, affect the overall atmosphere of the learning environment for the suspected gay or lesbian youth. Teachers often punish students for racist/ethnic remarks made; however, homophobic comments are usually unchallenged or sometimes perpetrated by teachers themselves (O'Connor, 1994). With the rise of violence in America's public schools, it becomes increasingly important to study the environmental contributors, namely future teachers, to determine how labels or behaviors influence their attitudes and how the underlying correlates to these attitudes are related. The study of current college students in teacher-training programs is important to evaluate the effectiveness of programs designed to reduce prejudice toward minority groups. Thus, more focused interventions at the higher education level could be recommended, implemented and studied to improve teacher relations with this group of at-risk students. This study will attempt to investigate a hypothetical model of discrimination for a subset of nationwide pre-service teachers' attitudes toward gay and lesbian youth, whether these youth are labeled or assumed by descriptions of stereotypical behaviors.

The Mechanism of Prejudice and Discrimination

The victimization of gay and lesbian individuals has a long history in this country. In 1624, in the American colonies, men were executed for sodomy or “crimes against nature.” For centuries, gay and lesbian individuals in this country have been forced to participate in violent and inhumane acts, such as involuntary psychiatric treatment, imprisonment, and even castrations and clitoridectomies (Herek, 1991). Today, physical and verbal victimization of homosexual youth is a serious problem that these individuals must deal with each day (Tharinger & Wells, 2000). This victimization occurs through the infliction of some form of hate crime or discrimination by another person. Hate crimes are defined as words or actions intended to harm or intimidate an individual because of his or her membership in a minority group (Franklin, 1998). This victimization, as well as family and peer rejection, are predictive indicators of several possible negative outcomes for the developing homosexual individual, including school-related problems, substance abuse, criminal activity, prostitution, running away from home, and suicide (Hennings-Stout, James, & Macintosh, 2000; Pilkington & D’Augelli, 1995; Savin-Williams, 1994). In fact, the rate of suicide among gay male, bisexual and lesbian youths is considerably higher than it is for heterosexual youth (Hennings-Stout, James, & Macintosh, 2000), with more completions than any other group represented in the United States (Remafedi, 1987).

Homosexual youth are extremely susceptible to the many stereotypes associated with belonging to this minority group. Stereotypes refer to people’s beliefs about the attributes of members of social groups (Ashmore & Del Boca, 1981; Brigham, 1971; Fiske & Neuberg, 1990; McCauley, Stitt, & Segal, 1980). Therefore, some sort of

cognitive process leads people to interpret, judge, and perceive individuals from different social groups differently. The research history of stereotypes has emphasized and documented the role of cognitive mechanisms in biases in judgments of individuals (Darley & Razio, 1980; Fiske & Neuberg, 1990; Hamilton, Sherman, & Ruvolo, 1990; Jones, 1986). However, recent research has begun to examine the affective structures underlying the biased perceptions regarding individual group members. These strong affective predispositions (i.e., prejudice) toward certain social groups may be in favor of or against certain groups, therefore influencing people's judgments regarding individual group members (Haddock, Zanna, & Esses, 1993; Jussim, Nelson, Manis, & Soffin, 1995). Teachers, among others, play an important part in the development of these prejudicial attitudes in children and adolescents. By refusing to correct verbal or physical abuse or allowing these biased perceptions to be expressed at school by other students, teachers propagate negative environments for the gay and lesbian students at their school.

Correlates Underlying Discrimination

The positive and negative attitudes educational professionals express toward gay and lesbian students, whether verbally or nonverbally, contribute significantly to the overall atmosphere and permissiveness of the school system in allowing discrimination to take place. Attitudes are defined as an overall categorization of an "attitude object" (gay or lesbian youth, in this case) along an evaluative dimension (e.g., favorable—unfavorable, positive—negative) (Eagly & Rempel, 1993; Haddock, Zanna, & Esses, 1993; Zanna & Rempel, 1988). The research history of attitudes toward gay and lesbian individuals reveals a pattern of consistent change within society. Morin (1977) conducted

an extensive review of the literature from 1967 to 1974 and found that less than 10% dealt with attitudes toward lesbians and gay men. He also noted that many of the studies up until that time were focused mainly on the diagnosis, cause, and cure of homosexuality. During the 1980's, however, research assessing these attitudes had increased. A meta-analytic review of the literature concerning this decade discovered an increased interest in studying attitudes toward homosexuals (Herek, 1991). Many of these studies, in addition to assessing attitudes, sought to uncover individual difference variables that correlate with such attributes. Although this research is important and useful in determining the type of individual most likely to express negative attitudes toward homosexuals, no studies were found examining the specific population of future teachers currently in education training programs.

One significant individual difference variable is that of authoritarianism. People high in authoritarianism exhibit high degrees of deference to established authority, aggression toward out-groups when authorities permit that aggression, and support for traditional values when those values are endorsed by authorities (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Altemeyer, 1981, 1988). A second individual difference variable important to understanding these negative attitudes is social dominance orientation. Social dominance orientation (SDO) is "the extent to which one desires that one's in-group dominate and be superior to out groups" (Pratto, Sidanius, Stallworth, & Malle, 1994, p. 742). Thus, from a sociological context, people high in SDO tend to hold negative attitudes toward a variety of groups that push for social equality, such as ethnic minorities, feminists, and lesbians and gay men (Altemeyer,

1998; McFarland & Adelson, 1996, 1997; Pratto, Sidanius, Stallworth, & Malle, 1994; Whitley, 1998, 1999).

A third within-individual variable that has not been studied in the context of these other variables is gender-role orientation. Beginning with a 1970's study summarizing the traits and behaviors that college students believed were characteristic of males and those they believed were characteristic of females (Broverman et al., 1972), researchers began to study the idea of androgyny, the presence of a high degree of desirable masculine and feminine characteristics in the same individual (Bem, 1977; Spence & Helmreich, 1978). According to these researchers, androgynous individuals are described as more flexible and more mentally healthy than either masculine or feminine individuals; hence, it is hypothesized that this will add to the discrimination attitudes (or lack of) toward a homosexual target. Several social and demographic variables have been associated with attitudes toward lesbians and gay men, such as personal contact, self-reports of homosexual experiences, perceptions of peers' attitudes, and education level (Herek, 1984). Finally, several studies have examined and replicated the content of the individual's stereotypes of lesbians and gay men. Male homosexuals, for example, were perceived as being feminine and possessing a high-pitched voice. Female homosexuals were perceived as being masculine and having short hair (Jackson & Sullivan, 1990; Kite & Deaux, 1987).

This study is an exploration of these individual differences and social/demographic variables that contribute to pre-service teachers' negative attitudes toward labeled and non-labeled gay and lesbian youth. Specifically, in a representative sample, would pre-service teachers' knowledge of a student's sexual orientation effect their

attitude toward, or opinion of, that student? Additionally a model of correlates, developed and supported by the literature, will be tested to determine support for the idea of prejudice toward gay and lesbian youth.

Purpose and Significance of the Study

To date, the study of the attitudes in pre-service teachers on labeled and perceived gay and lesbian students has not been adequately researched. In fact, most research in the area of attitudes toward labeled homosexuals has tended to lack a theoretical framework and has mainly focused on specific cognitive and affective aspects of individuals who discriminate. As several researchers have proposed (Bandura, 1986, 1995, 1997; Bronfenbrenner, 1986, 1995; Bronfenbrenner & Morris, 1997), the development of individuals does not occur in a vacuum; it is strongly influenced by a variety of sources. This study's theoretical underpinnings will focus on the school component of Bronfenbrenner's microsystem, namely the influences of future teachers; however, there are many other aspects to his theory, such as media, peers, parents, and peers, that effect the development of all individuals within a society. The various other systems within Bronfenbrenner's theory as it impacts the development of a homosexual individual will be targeted for future research and examination.

The negative attitudes or beliefs that teachers hold toward a gay or lesbian students affect the expectation the teacher has for that student (Salvia, Clark, & Ysseldyke, 1973). This can have a profound influence on the homosexual student's acceptance by his or her classmates. Research is emerging, however, that attempts to identify the underlying structure of these negative attitudes (Haddock, Zanna & Esses,

1993; Whitley, 1999). The expression of these negative attitudes toward a homosexual target usually take on two forms: (a) individual differences variables, and (b) social and demographic variables (Herek, 1991). This study will attempt to consolidate these variables into a cohesive theory underlying the permissiveness and expression of discrimination toward gay and lesbian individuals by future teachers.

Through a sample of college students in teacher-training programs at universities across the South and Midwest, a previously developed and piloted instrument, the Evaluation of Teacher Attitudes toward Homosexuality (ETAH), was evaluated in a 2 X 2 between-subjects design that assessed attitudes toward a labeled or non-labeled, gay or lesbian youth. A two-way ANOVA was the statistical procedure utilized to evaluate the differences between these four groups. In addition, individual difference and social/demographic data were gathered to assess the dynamic structure of these attitudes. Through Structural Equation Modeling (SEM), an *a priori* model of attitudes toward homosexuality was compared to the collected data and modified according to theoretical and statistical findings. The purpose of this study is to investigate the theoretical, underlying structure of the attitudes toward labeled and non-labeled gay and lesbian youth in a representative sample of pre-service teachers.

Research Questions

1. In what ways do labels and behaviors affect pre-service teacher's attitudes toward gay and lesbian youth?
2. In what ways are the correlates underlying attitudes toward homosexuality (gender-role orientation, level of authoritarianism, social dominance orientation) related to the overall attitude scores of pre-service teachers?

CHAPTER 2

REVIEW OF THE LITERATURE

Chapter Overview

This chapter will provide background information on the development of homosexual individuals in a predominantly heterosexual world, including the theoretical approach to the current study and the effects of labeling bias on gay and lesbian youth. In addition, several correlates are discussed that previous research has determined are directly linked to discrimination toward gay and lesbian individuals. Finally, the structural equation model symbolizing the dynamic underlying structure of prejudicial attitudes toward gay and lesbian students is developed and presented.

Introduction

There are ample professional guidelines (American Psychological Association, 1992; National Association of School Psychologists, 1992) to support psychologists' efforts to improve the climate of acceptance and safety for lesbian, gay, bisexual, transgender, and questioning students. In a joint resolution passed in 1993, the National Association of School Psychologists (NASP) and the American Psychological Association (APA) gave support and guidance to the appropriate treatment of sexual minority youth in schools by resolving that these organizations

take leadership roles in promoting societal and familial attitudes and behaviors that affirm the dignity and rights, within educational environments, of all lesbian, gay, and bisexual youths, including those with physical or mental disabilities and from all ethnic/racial backgrounds and classes, [and that these organizations] support providing a safe and secure educational atmosphere in which all youths, including lesbian, gay, and bisexual youths, may obtain an education free from discrimination, harassment, violence, and abuse, and which promotes an understanding and acceptance of self. (Governor's Commission on Gay and Lesbian Youth, p. 1)

Firmly grounded in the ethical code of both organizations (APA, 1992; NASP, 1992), this resolution calls for fair, responsive, and respectful service delivery to all people.

Along with the ethical reasons for promoting a safe education for all children, legal reasons have recently surfaced to reduce the harassment of sexual minority youth in schools. In 1996, the U.S. Seventh Circuit Court of Appeals ruled in favor of Jamie Nabozny's claim that his guarantee of equal protection had been violated (*Nabozny v. Podlesny*, 1995/1996). In this case, high school officials did not protect Nabozny, a high school student, from anti-gay harassment and violence, even after repeated complaints to them by Nabozny and his parents. The defendants (the district, the district administrator, two principals, and an assistant principal) settled with Nabozny for medical expenses and damages, totaling nearly one million dollars (Logue, 1997). The courts in this case raised important issues concerning why the school provided protection for other students but repeatedly ignored or explained away the abuse Nabozny experienced and reported (*Nabozny v. Podlesny*, 1995/1996). Another recent suit, *Iversen v. Kent School*, was

settled out of court, even though the court refused to dismiss the case and involved issues similar to those in the Nabozny case (Safe Schools Coalition of Washington, 1999). Iversen's suit alleged that during the course of his years in middle and high school, the district failed to respond to his complaints of being verbally and physically harassed as a result of being perceived as gay. These court cases lead to an important quandary concerning how schools can create a climate of safety through appropriate responses and prevention efforts for other groups, such as female students, students of ethnic and religious minorities, and students with handicapping conditions, but fail to protect those individuals who belong to, or are perceived as belonging to, a sexual minority. Because of the Nabozny case, school officials, including teachers, are now constitutionally required to stop the harassment of gay students.

The Development of the Homosexual Individual

Until the nineteenth century, it was commonly believed that individuals were either distinctly homosexual or heterosexual. From the pioneering efforts of Alfred Kinsey and his associates (1948), a more acceptable view of sexual orientation is that of a continuum from exclusive heterosexuality to exclusive homosexuality. A more current definition of sexual orientation includes it as one of four substrata to the definition of overall sexuality. The other three components to sexuality are biological gender, gender identity (the psychological sense of being male or female) and social gender role (adherence to cultural norms for feminine and masculine behavior (Gonsiorek & Weinrich, 1991). Hence, sexual orientation is different from overall sexual behavior

because it refers to feelings and self-concept, distinguished by an enduring emotional, romantic, sexual or affectional attraction to individuals of a particular gender.

Few investigators have researched the gay or lesbian identity (the “coming-out” process) in adolescents. Many of the studies in the literature have focused on the developmental stages of homosexuality from an adult perspective (e.g., Bell, Weinberg, & Hammersmith, 1981; Gonsiorek & Weinrich, 1991; Patterson, 1995; Strickland, 1995) and, more recently, the emotional/behavioral responses to victimization gay and lesbian youth endure (e.g., Hershberger & D’Augelli, 1995; Rotheram-Borus et al., 1995; Safren & Heimberg, 1999; Savin-Williams, 1994). The developmental literature indicates these negative, abusive contexts have lasting, cumulative effects as they damage or impair crucial adaptive systems (i.e., quality of parent-child attachment, cognition, self-regulation of attention, emotion, behavior (Cicchetti & Toth, 1998). The specific environmental influences of teachers in the educational environment, which impact these vulnerable groups and their heterosexual counterparts, have not been well studied to date.

The development of gay and lesbian youth is significantly influenced by the simple fact of being homosexual in a predominantly heterosexual society (Savin-Williams, 1990; Sophie, 1986). Gay and lesbian youths are often subjected to cruel and demeaning treatment from their peers and teachers, especially within the school environment (Wells, Lasser, & Tharinger, 1997). Homosexual students are more likely than their heterosexual counterparts to report missing school due to fear, being threatened by other students, and having their property damaged (Garofalo, Wolf, Kessel, Palfrey, & Du Rant, 1998). For these reasons, gay and lesbian teenagers often feel isolated and stigmatized, with many lacking peer or familial support. As a consequence, most of these

individuals choose to remain “in the closet,” unwilling to share their sexual orientation with others for fear of being ridiculed or assaulted. Known as “passing,” this form of self-devaluation is the process of hiding one’s real social identity (Patterson, 1995; Savin-Williams & Rodriguez, 1993). Passing strategies include giving out information that hides one’s homosexual identity or avoiding one’s true sexual identity. In addition, male homosexuals are more likely to externalize these stressors than their female counterparts, thus increasing their visibility. Many of these acting-out behaviors include school-related problems, running away from home, conflict with the law, substance abuse, prostitution, and suicide (Savin-Williams, 1994). This type of negative environment increases the impact on the adolescent’s mental health. A special concern is the lack of support gay and lesbian adolescents receive from parents, teachers, and counselors (Davis & Stewart, 1997; Gruskin, 1994).

Several correlates have been studied that seem to buffer the negative effects of victimization on sexual minority youth. Hershberger and D’Augelli (1995) found that when the level of victimization is low, family support lessened the detrimental effect on the adolescent’s mental health. However, when the levels of victimization in these youth were measured between moderate and high, familial support failed to contribute to the child’s resiliency. The strongest predictor of positive mental health, they found, was the youth’s self-acceptance of their sexuality as a part of their overall personality makeup. However, teachers frequently fail to respond to violence and harassment directed at gay and lesbian youth. In one study of 289 teachers and 52 principals from nine urban, suburban, and rural Connecticut high schools indicated that teachers were the most unwilling group to discuss homosexuality with their students, believing they were not

open to the discussion of homosexuality with gay or non-gay students (Woog, 1995). The recent case of Jamie Nabozny in Wisconsin set an important precedent in holding schools and school principals liable for damages when they treat abuse of lesbian or gay students less seriously than other forms of abuse (Buckel, 1996). Currently, only six states have laws and policies protecting gay high school students from discrimination in one form or another and only Los Angeles, New York, and Dallas have high schools devoted specifically to gay and lesbian youth (Tharinger & Wells, 2000). For most of the gay and lesbian youth in the United States, there are no special programs, no task forces, no after-school discussion groups, and certainly no openly gay teachers in their schools.

Bronfenbrenner (1995) proposes a strong bio-environmental view of children's development that is receiving increased attention in the literature. This model posits a strong bioecological view on the development of any individual and has not been studied in the context of homosexual development. Made up of several systems, Bronfenbrenner's bioecological theory describes both direct and indirect, reciprocal influences upon the development of all individuals within a society, such as parents, peers, schools, teachers, and the media (Bronfenbrenner, 1995). Bandura's Model of the Reciprocal Influences of Behavior, Person and Cognitive Factors, and Environment, when combined with each of the indirect and direct influences of Bronfenbrenner's model, describes a very complex system surrounding the development of all individuals (Bandura, 1986, 1995, 1997; Bronfenbrenner, 1986, 1995; Bronfenbrenner & Morris, 1997). The development of gay and lesbian youths within this context reveals a struggling adolescent within the ecology of heterosexism, previously known as homophobia.

Homophobia was defined as anxiety or anticipatory anxiety in a person elicited by homosexual individuals (Adams, Wright, & Lohr, 1996; MacDonald, 1976). However, Herek (1996) reported that evidence does not support the physiological responses of heterosexuals to homosexual individuals that are associated with other phobias. Therefore, the term heterosexism is used to describe heterosexuals' prejudices against lesbians and gay men and the behaviors based on those prejudices (Tharinger & Wells, 2000). As such, heterosexism is similar to other forms of prejudice (e.g., racism, ageism, sexism, etc.). In fact, Herek (1993) defined heterosexism as "the ideological system that denies, denigrates, and stigmatizes any non-heterosexual form of behavior, identity, relationship, or community" (pp. 89-90). Taking Herek's idea a step further reveals that heterosexism also encompasses the belief, whether spoken or unspoken, that heterosexuality and heterosexual persons are in some way superior to or more valued than alternative sexual orientations.

Labeling Bias

The phenomenon of labeling bias, also known as stereotyping, is prevalent throughout our country. This "labeling effect" refers to "phenomena whereby perceivers' interpretations, evaluations, or judgments of different targets depends on the groups to which the individual targets belong (or seem to belong)" (Jussim, Nelson, Manis, & Soffin, 1995, p. 229). Therefore, simply applying a label to an individual will influence how perceivers judge and evaluate that individual. For example, Duncan (1976) reported that a shove committed by an African-American individual was seen as more aggressive than a shove given by a White individual. Labeling bias can affect many individuals from

a variety of backgrounds. For example, a majorette was barred from performing during a football game because she was 1 ½ pounds over the weight guidelines given by the school's band director; a paralyzed man was forbidden by his church diocese to marry his nurse because he could not consummate the marriage; or an African-American business man who recently moved to an affluent, predominately white neighborhood is picked up twice by the local police and questioned about why he is in this neighborhood (Jones et al., 1984). Other studies have examined the variety of attributes from a labeled individual that can underlie specific attitudes in pre-service teachers, such as sexual orientation, level of promiscuity, gender and ethnicity of the target (Cruce, Stinnett, & Choate, 2003; Stinnett, Cruce, & Choate, in press). When these future teachers enter the classroom, they will frequently come into contact on a day-to-day basis with children and adolescents who deviate from the norm, whether the deviation is physical, behavioral, mental, or social. Whether overtly or covertly, teachers serve as models for appropriate behavior toward any child. Labeling an individual "homosexual" often influences how teachers judge and evaluate that person.

Various aspects of the environment have been implicated in affecting the development of all children. Bandura's (1986, 1995, 1997) most recent model of learning and development involves the factors of behavior, person/cognition, and the environment. Each of these factors operates interactively on the developing individual, in this case the gay and lesbian youth, to influence the growth and change in each of the other factors. According to Bandura (1977, 1995, 1997) and Mischel (1995), individuals learn by observing what others do. Through observational learning, which is also known as modeling or imitation, individuals cognitively represent the behavior of others and then

possibly adopt this behavior for their own. These social learning theorists do not believe individuals are mindless robots that respond mechanically to others in their environment. They take into account the person's cognitive processes, such as the ability to think, reason, expect, interpret, value, and believe. These processes allow the individual to resist or accept change in his or her own behavior when outside influences impact him or her. The educational environment, namely the teachers and future teachers, plays a significant role in the development of all its students.

Labeling effects have been obtained using a wide variety of social groupings (gender, race, ethnicity, psychiatric labels, medical labels, social class, etc.) and under a range of laboratory and naturalistic conditions (Cruce, Stinnett, & Choate, 2003; Darley & Fazio, 1980; Fiske & Neuberg, 1990; Grant & Holmes, 1981; Hamilton, Sherman, & Ruvolo, 1990; Krueger & Rothbart, 1988; Rosenham, 1973; Miller & Turnbull, 1986; Rosenham, 1973; Stinnett, Cruce, Choate, in press). Gay (1979) maintained that the attitudes teachers hold about their students and how they relate to them on an interpersonal basis is more important in making a difference in the school lives of these students than what is formally being taught through the curriculum. If this is true, then teachers' attitudes, values, beliefs and behaviors create a psychological framework in which teaching and learning occur. Negative consequences to the students can develop if these negative attitudes exhibit themselves to a labeled or perceived gay or lesbian youth. Stereotyping is an important aspect to Bandura's theory that can affect an individual's beliefs and reactions to sexual minority youth. Stereotyping is part of Bandura's theory that reflects the impression and beliefs of what a typical member of a particular group is like (Santrock, 1998). Two correlates have been identified that significantly contribute to

this labeling bias towards sexual minority youth and will be discussed in the following sections. These processes, along with gender-role orientation, will form the basis for a hypothetical model of interactions in a discrimination model with pre-service teachers.

Right-Wing Authoritarianism

With the rise of fascism during the 1930's, several researchers began to define the concept of an authoritarian personality. They defined this term as meaning that people high in authoritarianism will exhibit high degrees of deference to established authority, aggression toward out-groups when authorities permit that aggression, and support for traditional values when those values are endorsed by authorities (Adorno, Frenkel-Brunswik, Levinson, and Sanford, 1950). Over the past 50 years, the definitions and measures for this personality construct have evolved significantly to be better operationalized for research purposes (Christie, 1991). Right-Wing Authoritarianism (RWA), as termed by Altemeyer (1981, 1988, 1996), has consistently been associated with prejudice, discrimination, and hostility against members of out-groups. People high in RWA have been found to be prejudiced against African Americans (e.g., Altemeyer, 1998; McFarland & Adelson, 1996, 1997; Whitley, 1998), Native Americans (Altemeyer, 1998), women (e.g., Altemeyer, 1998; Duncan, Peterson, & Winter, 1997; McFarland & Adelson, 1996, 1997), lesbians and gay men (Whitley, 1999), people with visible handicaps (e.g., Noonan, Barry, & Davis, 1970), and people with AIDS (e.g., Cruce & Choate, 2000; Cruce, Stinnett, & Choate, 2003; Cunningham, Dollinger, Satz, & Rotter, 1991; Peterson, Doty, & Winter, 1993). In addition, cultural pervasiveness across samples in North America and Russia indicate significant correlations between

individuals high in RWA and overall expressions of prejudice, such as violence (McFarland, Ageyev, & Abalakina, 1992; McFarland, Ageyev, & Djinttcharadze, 1996).

Two characteristics of RWA have been found to mediate the attitudes of individuals when the target has been identified as belonging to a sexual minority group. First, people who are high in RWA tend to organize their worldviews in terms of in-groups and out-groups; that is, they divide and categorize people based upon characteristics that threaten traditional values. High RWAs defend their value system through derogation of members of out-groups; moreover, prejudice provides an outlet for the hostility and aggression aroused by this perceived threat to their value system. A second characteristic of people who are high RWAs is a self-righteous outlook wherein they feel justified in looking down on anyone defined by authority figures as less moral than themselves (Altemeyer, 1998). In a 1997 study of rural school nurses' attitudes toward homosexuality, the investigators found that the school nurses most positive in their attitudes about homosexuals were less likely to have strong religious beliefs (Yoder, Preston, & Forti, 1997). High RWAs will express prejudice against members of out-groups, such as gay and lesbian youth, who are condemned by authority figures as an immoral threat to traditional values (Altemeyer 1981, 1998; Whitley, 1999).

RWA is based on submission to the beliefs promulgated by in-group authority figures and results in hostility and negative attitudes toward groups condemned by those authority figures (Altemeyer, 1981, 1988, 1996). Because religious authorities may be especially powerful influences on these kinds of attitudes (Altemeyer, 1996, 1998; McFarland & Adelson, 1997), RWA would be expected to be strongly related to attitudes toward groups, such as lesbians and gay men, who are portrayed by many religious

authorities as violating traditional religious teachings. The expression of RWA is a major component of the theory (Altemeyer, 1981, 1988, 1996); however, RWA has been found to positively correlate with concern over making a favorable impression on others (McFarland & Adelson, 1996; Whitley, 1999). Therefore, people high in RWA inhibit their expression of negative attitudes toward other minority groups because such expressions are unacceptable in most public circumstances (Kite & Whitley, 1996). In contrast, because expressions of heterosexism receive less disapproval and are modeled by some authority figures (Kite & Whitley, 1996), high RWAs probably feel free to express these negative attitudes toward homosexuality. Thus, RWA seems to be more closely related to the affective responses to the individual from the minority group.

Social Dominance Orientation

The Social Dominance Orientation (SDO) of an individual differs from his or her authoritarian style in the cognitive role played by stereotypes. Stereotypes legitimize myths that people high in SDO use as a means of justifying their negative attitudes (Sidanius, 1993; Sidanius & Pratto, 1993; Sidanius, Pratto, & Bobo, 1994). Thus, RWA can be thought of as a within-group phenomenon while SDO behaves more as a between-group phenomenon (Whitley, 1999). SDO represents “the extent to which one desires that one’s in-group dominate and be superior to out-groups” (Pratto, Sidanius, Stallworth, & Malle, 1994, p. 742). The desire to maintain the superior position of their particular in-group motivates the person high in SDO to denigrate members of out-groups, oppose equality-enhancing social programs such as affirmative action, and discriminate against individuals from out-groups in order to enforce the status quo (Sidanius, 1993; Sidanius

& Pratto, 1993). Many groups pushing for social equality, such as ethnic minorities, feminists, and lesbians and gay men, are targets for individuals high in SDO (Altemeyer, 1998; McFarland & Adelson, 1996; Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius, Pratto, & Bobo, 1994; Whitley, 1999).

Because this perspective emphasizes a person's desire to maintain the dominance of their in-groups, SDO is deeply rooted in the opposition to the redistribution of the benefits that derive from holding a dominant position in society, such as wealth, education, and jobs (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius, Pratto, & Bobo, 1996). Unlike RWA, which is related to an individual's affective responses to a target individual, SDO is reflected more in the cognitive attitudes an individual has toward enhancement of inter-group equality (Whitley, 1999). Empirical evidence supports the unique qualities of SDO from other correlates of labeling bias toward homosexuality, such as RWA (Altemeyer, 1998; McFarland & Adelson, 1996, 1997; Whitley, 1998) and appears to underlie most forms of discrimination (Whitley, 1999). In fact, evidence reveals that people high in SDO devalue out-groups as a whole and oppose their efforts to close social and economic gaps between themselves and the dominant social group, but that they would not necessarily "dislike" the target individual (Altemeyer, 1981, 1988, 1996, 1998; Whitley, 1998, 1999).

High SDO represents a worldview and personality characteristic in which one's own identity group should be dominant over other groups, leading to an "us" versus "them" approach to viewing the world. By its very nature, then, SDO predisposes people to express prejudice against all out-groups, allowing them to denigrate members of "lesser" groups and endorse stereotypes of these groups as a means of justifying their

own social dominance (Sidanius, 1993; Sidanius & Pratto, 1993; Whitley, 1998, 1999). Thus, SDO appears to be one strata of prejudice with RWA layering on an additional affective component in the cases of groups condemned by authority figures, such as homosexuals. In addition to RWA and SDO, the concept of gender-role has been considered another potential correlate underlying attitudes toward homosexuality.

Gender and Gender Stereotyping

The idea of gender “refers to the sociocultural dimension of being male or female” (Santrock, 1998, p. 343). No other dichotomy of life’s experiences seem to have as many features linked to it as does the distinction between being male and female (Paludi, 1995). As children grow in a culture, they begin to take on a set of expectations that prescribe how females and males should think, act, and feel (Kohlberg, 1966). Part of this gender-typing process occurs as children develop a concept of what gender is and organize their worldview on this basis. More recently, a theory has grown out of Kohlberg and Piaget’s research called gender schema theory. This theory postulates that an individual’s attention and behavior are guided by an internal motivation to conform to gender-based socio-cultural standards and stereotypes. It emphasizes the active construction of gender but also accepts that societies determine which schemas are important and the associations involved (Ruble & Martin, 1997). The presence of both expressive and instrumental traits (feminine and masculine, respectively) in the same individual represents the concept of androgyny (Bem, 1977; Spence & Helmreich, 1978). These individuals are described as more flexible and generally more mentally healthy than masculine, feminine, or undifferentiated individuals (Bem, 1977). Most literature in

the area of attitudes toward homosexuality has focused on individuals who hold traditional masculine or feminine gender roles.

These gender differences tend to mediate these differences in expressions of prejudiced attitudes toward homosexuality. The finding that men are more likely than women to express their negative attitudes about sexual minorities, as well as other out-groups, has been replicated and well established in a growing body of literature (e.g., Altemeyer, 1998; McFarland & Adelson, 1996, 1997; Whitley, 1998, 1999). Evidence from the literature on attitudes toward homosexuality suggest that heterosexuals' beliefs about gay men and lesbians cannot be separated from their beliefs about the appropriate gender roles for women and men (e.g., Deaux & Kite, 1987; Kite, 1994; Oliver & Hyde, 1993; Whitley & Kite, 1995). These stereotypes refer to an image of what the typical member of a particular social category is like. For example, both undergraduates (e.g., Herek, 1984; Kite & Deaux, 1987) and a national survey of respondents (Klassen, Williams, & Levitt, 1989) have reported that gay men and, to a lesser extent, lesbians possess characteristics of the other sex. These inferences work in the opposite direction as well; people are much more likely to believe that a man or woman is homosexual if they learn the person's behavior is gender inconsistent (Deaux & Lewis, 1984; Storms, Stivers, Lambers, & Hill, 1981).

Masculine and feminine stereotypes modify themselves over time and in the face of cultural change. Diverse behaviors can be called on to support each stereotype, such as scoring a touchdown or growing facial hair as "masculine traits" and playing with dolls or wearing lipstick as "feminine traits" (e.g., Ashmore & Del Boca, 1981; Grant & Holmes, 1981; Hamilton, Sherman, & Ruvolo, 1990; Santrock, 1998). Even though the

behaviors often do not fit the stereotype, the label itself can have significant emotional and social consequences on the homosexual individual (Cunningham, Doolinger, Satz, & Rotter, 1991; D'Augelli & Hershberger, 1993; Harry, 1989). According to an extensive study of college students in thirty countries, stereotyping of females and males is pervasive (Williams & Best, 1982). The respondents in this study believed males to be dominant, independent, aggressive, achievement oriented and enduring, while females were widely believed to be nurturant, affiliative, less ego-centered and more helpful in times of distress. More recently, the same researchers found that women, more so than men, who live in more highly developed countries perceived themselves as more similar than did women and men who lived in less-developed countries (Williams & Best, 1989). Thus, it seems that as sexual equality increases, male and female stereotypes, as well as actual behavioral differences, may diminish faster in females than in males (Williams & Best, 1989). The sex differences in attitudes toward homosexuality stem from the societal emphasis on people, men in particular, behaving consistently with prescribed gender roles. Moreover, gay men and lesbians are disliked, at least in part, because of their perceived gender role deviance (Laner & Laner, 1979, 1980), particularly by people who hold traditional gender role attitudes (Krulowitz & Nash, 1980).

Stereotypic beliefs about gender roles are clearly linked to heterosexism and an individual's own perceptions of gay men and lesbians, as mediated by RWA and SDO. Men, in particular, are more likely than women to feel pressure to conform to the appropriate social roles for their gender. This pressure in males to conform may result in more negative expressions of attitudes toward homosexuals, especially in gay men, because these individuals clearly deviate from the prescribed gender roles for men

(Oliver & Hyde, 1993; Whitley & Kite, 1995). These attitudes may also be affected by the biological gender of the person rated, with research showing higher negative attitudes in men when the target is a gay man (e.g., Gentry, 1987; Herek, 1988; Kite, 1994; Whitley, 1987) and higher negative attitudes in women when the target is a lesbian (e.g., Gentry, 1987; Whitley, 1987, 1990). As recent meta-analyses have pointed out (Oliver & Hyde, 1993; Whitley & Kite, 1995), heterosexism is more common with male heterosexuals than for female heterosexuals and points to the importance of gender roles in understanding this sex difference. In addition, Whitley and Kite (1995) state that “additional work is needed to fully explore the theoretical basis for antigay prejudice. Only through increased conceptual understanding of the basis for this prejudice can one hope to eliminate it” (p. 152). This study attempts to develop a theoretical model utilizing RWA, SDO and gender-role for better understanding of the dynamics underlying the expression of attitudes toward homosexuality.

Structural Equation Modeling Methodology

Structural Equation Modeling (SEM) consists of several statistical procedures that allow the examination of relationships between one or more independent variables, either discrete or continuous, and one or more dependent variables, either discrete or continuous. This procedure is known by many different names, such as causal modeling, causal analysis, simultaneous equation modeling, or analysis of covariance structures. Path analysis procedures and confirmatory factor analysis are simply special types of SEM (Ullman, 1996).

SEM answers questions involving multiple regression analyses of factors. Ullman (1996) describes SEM as a combination of exploratory factor analysis with multiple regression. However, SEM differs from other types of research methodologies because it requires prior knowledge and hypotheses of potential relationships among variables. Path diagrams are essential to SEM because they provide a visual representation of the hypothesized set of relationships the researcher develops. These diagrams allow the researcher to clarify his or her ideas about the relationships among variables, which can then be directly translated into the equations for the analysis.

In SEM diagrams, squares or rectangles represent the measured variables. Latent factors have two or more indicators (measured variables) and are represented by circles or ovals in path diagrams. Lines and arrows indicate the relationships between these variables; hence, the lack of a line between variables implies no hypothesized relationship between them. Lines with one arrow represent a hypothesized direct relationship between two variables, whether measured or latent. The variable with the arrow pointing to it is the dependent variable. Lines with arrows at both ends indicate an unanalyzed relationship, usually representing the covariance or correlation between the two variables with no implied direction of effect (Ullman, 1996).

Structural Equation Model Hypothesized for Discrimination

Many studies have called for the development of an underlying model to explain individuals' attitudes toward homosexuality (Oliver & Hyde, 1993; Whitley, 1999; Whitley & Kite, 1995). Evidence in the literature indicates three major correlates to these attitudes—RWA, SDO and gender role—as moderating the expression of attitudes

toward homosexuality. Specifically, no research could be found that incorporated all three of these variables into the studies with the same populations. This could be that gender-role has never been associated with RWA or SDO through correlations.

Furthermore, previous studies did not utilize statistical processes that incorporated an a priori theoretical model to test for fit among the covariances. Through the use of SEM and more powerful computer software, it has now become possible to test a model developed from the literature on a specific population.

Two latent factors were utilized in the model—gender role and attitude toward homosexuality. It was hypothesized that the gender role identity of the pre-service teacher would add more to the expression of attitudes than just their attitude toward homosexuality. The gender role identity factor was constructed from the biological sex of the respondent and his or her responses on the Bem Sex-Role Inventory (Bem, 1977). The attitude toward homosexuality factor was constructed from the Social Dominance Orientation Scale (Pratto, Sidanius, Stallworth, & Malle, 1994) and the Right-Wing Authoritarianism Scale (Altemeyer, 1981). Significant evidence has linked Social Dominance Orientation and Right-Wing Authoritarianism (e.g., Haddock, Zanna, & Esses, 1993; Whitley, 1998, 1999) to negative attitudes toward homosexual men and women. Whitley (1998, 1999) examined both of these influences in conjunction with an attitude measure of homosexuality and found that these two cognitive mindsets accounted for almost half of the variance associated with the negative attitudes. These same studies found that Right-Wing Authoritarianism consistently had approximately 35% of the variance associated with an attitude measure toward homosexuality while Social Dominance Orientation added an additional 15-20% of the variance to the regression

equation (Whitley, 1998, 1999). It is hypothesized that a multivariate combination of the covariance between these two constructs will identify an underlying latent factor associated with a cognitive mindset toward homosexuality. In addition, specific knowledge of a gay or lesbian individual on the part of each participant was hypothesized to moderate the expression of attitudes toward homosexuality (See Figure 1).

Key: E1 – E7 = Error terms for dependent variables
 D1 – D2 = Distortion terms for latent variables

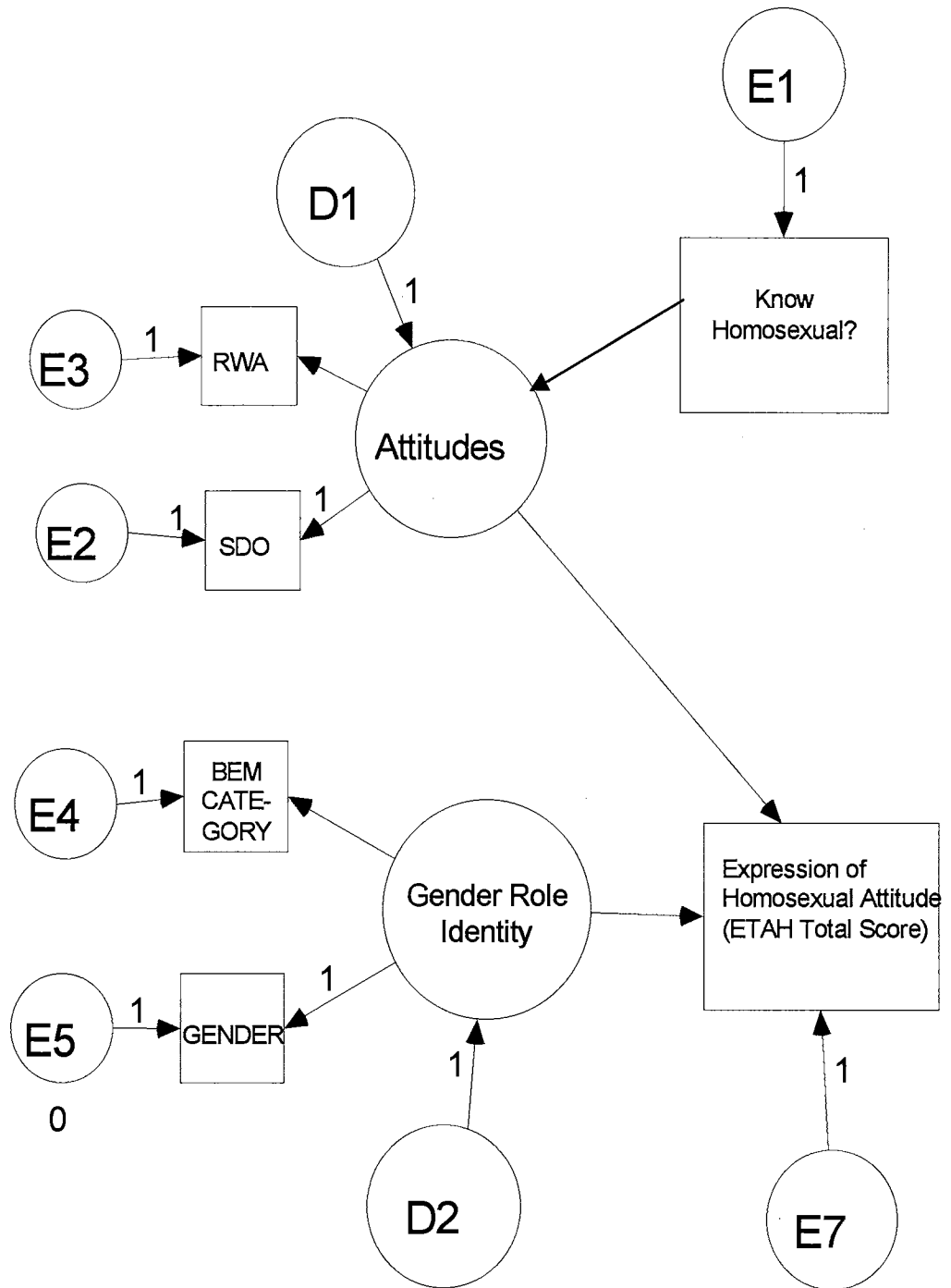


Figure 1. Initial SEM Model

CHAPTER 3

METHOD

Chapter Overview

The purpose of this study was to examine the labeling effects on perceived or labeled gay and lesbian youth. In addition, the underlying structure of these attitudes towards homosexuals was examined in a sample of pre-service teachers. This chapter begins with an explanation of the causal-comparative research method chosen because of its suitability for exploring the effects caused by membership in a given group. Following an explanation of the reasoning for the use of the research design, the subjects and instrumentation that were used in this study are described. Included in this discussion will be the standardized procedures for conducting data collection and demographic information concerning this sample.

Research Methods/Designs

Several attempts to answer questions concerning society's attitude toward homosexuality have been employed by researchers over the past few years (e.g., Ashmore & Del Boca, 1981; Broverman, et al., 1972; Duncan, 1976; Haddock, Zanna, & Esses, 1993). Many found significant evidence linking social dominance orientation and right-wing authoritarianism (e.g., Haddock, Zanna, & Esses, 1993; Whitley, 1998, 1999) to negative attitudes toward homosexual men and women. Whitley (1998, 1999)

examined both of these influences in conjunction with an attitude measure of homosexuality and found that these two cognitive mindsets accounted for almost half of the variance associated with the negative attitudes. The question remains, though, as to what is accounting for the other fifty percent of the variance and whether the interactions associated with gender role will add to the amount of variance accounted for in this study.

The research studies conducted in the studies with RWA and SDO did not take into account the gender-roles of the subjects examined. According to several differing studies concerning gay and lesbian discrimination, gender-role plays a relatively important part in people's reaction to different groups, explaining as much as 20% of the variance (e.g., Deaux & Kite, 1987; Kite, 1994; Oliver & Hyde, 1993; Whitley & Kite, 1995). Specifically, no research could be found in the major scientific journals that provided evidence of the structure of teachers'-in-training attitudes toward homosexual youth. Meta-analyses have indicated that most of the studies of attitudes toward homosexuality have been based upon college samples and that many of the findings can be generalized to the college population (Oliver & Hyde, 1993; Whitley, 1995). It seems important, then, to examine this specific population as future teachers play a prominent role in the overall atmosphere of the school and the development of all children in their classroom. Because this study is investigating the consequences of differences that already exist between or among groups of individuals, a causal-comparative design was selected to explore the effect of labels on a measure of attitudes among these groups.

Subjects

The participants were 308 undergraduate and graduate students enrolled in undergraduate teacher education classes at four Midwestern and Southern universities. All subjects were enrolled in teacher education classes (e.g., Childhood Development, Adolescent Development, Teaching Students with Special Needs) during the first four weeks of the Fall 2002 semester. Three hundred and eight pre-service students in teacher education programs at four universities were selected from the following states: Oklahoma, Texas, Iowa and Michigan. Six of the participant protocols were omitted from the final subject pool due to missing or incomplete data on the instruments. Table 1 displays the distribution of subjects' attending university and the percentage of the total sample.

Table 1

State of Subject University (N = 302)

University	<i>n</i>	<i>Percent</i>
Oklahoma	108	35.8
Michigan	85	28.1
Texas	59	19.5
Iowa	50	16.6

Demographic information requested for this study consisted of gender, age, race/ethnicity, relationship status, subject status in college (e.g., Freshman, Sophomore), subject's state of high school graduation, and the anticipated certification and teacher-training track of the subjects. All of these demographic questions were listed in a checklist or "fill-in-the-blank" format on two sheets of paper embedded into the packet of questionnaires (see Appendix F).

Of the final 302 participants, the majority were female (245) which made up 81.1% of the final pool. The remaining 57 subjects were male, accounting for 18.9% of those participating in this study. Table 2 provides a summary of the frequency and percentage of subject by gender.

Table 2

Gender of Subjects (N = 302)

Gender	<i>n</i>	<i>Percent</i>
Female	245	81.1
Male	57	18.9

The 302 subjects varied in age with an age range of 17 years old to 54 years old. The mean age of the total sample was 22.88 with a standard deviation of 6.88. The median age of the total sample was 21.00 years old. The modal age of the total sample was 20 years old. The 245 female subjects had a mean age of 23.24 with a standard deviation of 7.48. The median age for the female subjects was 21.00 years old. The

modal age for the female subjects was 20.00 years old. The 57 male subjects had a mean age of 21.33 with a standard deviation of 2.75. The median age for the male subjects was 21.00 years old. The modal age for the male subjects was 22.00 years old. Table 3 provides a summary of the age of the subjects by their gender.

Table 3

**Age of Subjects (N = 302)*

Gender	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	mode
Female	245	23.24	7.48	21.00	20.00
Male	57	21.33	2.75	21.00	22.00
Total	302	22.88	6.88	21.00	20.00

**Age range is 17 to 54 years old*

The race and ethnicity of each participant was also obtained. Of the 302 respondents, three did not provide information concerning their racial identity. The majority of the remaining participants were European-American/Caucasian (274 of the 299 subjects), making up 90.7% of the sample. Ten subjects (3.3%) were Hispanic/Latino and 5 subjects (1.7%) were African-American. Five subjects (1.7%) were American Indian/Native American and 4 subjects (1.3%) were Asian-American. One subject indicated “Other” as their race, but did not specify the ethnicity. Table 4 provides a summary of the race and ethnicity of the subjects.

Table 4

Ethnicity of Subjects (N = 302)

Race	<i>n</i>	<i>Percent</i>
European-American/Caucasian	274	90.1
African-American	5	1.7
Latino(a)/Hispanic/Puerto Rican	10	3.3
Asian-American	4	1.3
American Indian/Native American	5	1.7
Other	1	0.3
No Answer	3	1.0

The relationship status of the subjects was also gathered as part of the demographic information. A majority of the participants (182 of the 302 subjects) indicated that their current relationship status was “single/never married.” This accounted for 60.3% of the total sample. Sixty-four participants (21.2%) described their relationship status as being a “committed relationship/significant other” and forty-six (15.2%) indicated a relationship status of “married.” Eight subjects (2.6%) were “divorced” and 2 subjects (0.7%) were “widowed.” Table 5 provides a summary of the relationship status of the subject pool.

Table 5

Relationship Status of Subjects (N = 302)

Status	<i>n</i>	<i>Percent</i>
Single/Never Married	182	60.3
Married	46	15.2
Divorced	8	2.6
Widowed	2	0.7
Committed Relationship/ Significant Other	64	21.2

Participant's current educational level in their teacher education program was also gathered as part of the data collection process. Of the final pool of subjects, a majority indicated that they were either a junior or senior in their college. Thirty-six participants (11.9%) indicated that they were freshmen in college. Forty-three subjects (14.2%) indicated that were sophomores in college. One hundred and twenty-six subjects (41.7%) indicated that were juniors in college. Seventy-four subjects (24.5%) indicated that they were seniors in college. In addition, three subjects (1.0%) classified themselves as special students in college while twenty subjects (6.6%) classified themselves as graduate students in college. The subjects were enrolled in undergraduate, teacher preparation at their various universities. All data collection occurred during the first four weeks of the Fall 2002 semester. Table 6 provides a summary of the college educational level of the subjects.

Table 6

College Educational Level of Subjects (N = 302)

Education Level	<i>n</i>	<i>Percent</i>
Freshman	36	11.9
Sophomore	43	14.2
Junior	126	41.7
Senior	74	24.5
Special Student	3	1.0
Graduate Student	20	6.6

As part of the demographic information collection, each subject's state of high school graduation was also obtained. A majority of participants (158 out of 302) had graduated from an Oklahoma or Michigan high school, which accounted for 62.3% of the sample. Other states of high frequency of high school graduation were Texas, Illinois, and Iowa. Two subjects had graduated high school outside of the United States. Thirty-three of the subjects did not answer the question concerning state of high school graduation. Table 7 provides a summary of the location of high school graduation for the subjects.

Table 7

Location of Participant's High School Graduation

Location of High School	<i>n</i>	<i>Percent</i>
Oklahoma	84	27.8
Michigan	74	24.5
Texas	49	16.2
No Answer	33	10.9
Iowa	23	7.6
Illinois	14	4.6
Missouri	4	1.3
Minnesota	3	1.0
Arizona	2	0.7
Colorado	2	0.7
California	2	0.7
Kansas	2	0.7
Arkansas	1	0.3
Pennsylvania	1	0.3
Georgia	1	0.3
Indiana	1	0.3
North Dakota	1	0.3
Wisconsin	1	0.3
Louisiana	1	0.3
Florida	1	0.3
Taiwan	1	0.3
Japan	1	0.3
Total	302	100.0

The certification level the pre-service teacher was working towards was also gathered in the data collection process. A majority of participants (132 out of 302) were seeking elementary education certification, which accounted for 43.7% of the total sample. Ninety participants (29.8%) were seeking secondary education certification. Forty-five participants (14.9%) were seeking early elementary education certification.

Thirty participants (9.9%) were seeking K-12 certification. Four participants (1.3%) indicated their certification level as “other,” but did not specify the particular grade level sought. One participant (0.3%) did not answer the question. Table 8 provides a summary of the subjects’ anticipated certification level in teaching.

Table 8

Anticipated Certification Level of Participants (N = 302)

Certification Level	<i>n</i>	<i>Percent</i>
Early Elementary	45	14.9
Elementary	132	43.7
Secondary	90	29.8
K-12	30	9.9
Other	4	1.3
No Answer	1	0.3

Demographic information was also collected concerning the type of teacher training the participants were receiving. A majority of subjects (212 out of 302) were taking classes in a regular education track of their teacher training, which accounted for 70.2% of the total sample. Fifty-seven participants (18.9%) were taking classes in the special education track of their teacher training. Fourteen participants (4.6%) were taking classes in the vocational education track of their teacher training. Nine participants

(3.0%) were taking classes in the physical education track of their teacher training. Seven participants (2.3%) indicated training as support personnel for the school, such as a counselor, speech pathologist or school psychologist. Two participants (0.7%) indicated training as administrators for the school, such as a principal or superintendent. One (0.3%) participant did not answer the question. Table 9 provides a summary of the type of teacher training track the subjects are in at their university.

Table 9

Teacher Training Track for Participants (N = 302)

Teacher Training Track	<i>n</i>	<i>Percent</i>
Regular Education	212	70.2
Special Education	57	18.9
Physical Education	9	3.0
Vocational Education	14	4.6
Administration	2	0.7
Support Personnel	7	2.3
No Answer	1	0.3

The pre-service teachers were also asked three questions as part of the demographic collection process. On the first question, “I am friends or family with someone who ‘came out’ to me, indicating their sexual orientation as being ‘homosexual’ or ‘bisexual,’” 172 participants (57%) answered “yes” and 130 participants (43%)

answered “no.” On the second question, “I have had a college course or high school course dealing exclusively with diversity and multicultural issues, including sexual orientation,” 130 participants (43%) answered “yes” and 172 participants (57%) answered “no.” On the third question, “I believe that having an understanding of homosexuality is important in my professional development since I may be working directly with people who are homosexual,” 253 participants (83.8%) answered “yes,” 47 participants (15.6%) answered “no,” and 2 participants (0.7%) did not answer. Table 10 provides a summary of the responses to these three questions.

Table 10

Responses to Supplemental Questions (N = 302)

Question	Yes		No	
	<i>n</i>	<i>P</i>	<i>n</i>	<i>P</i>
I am friends or family with someone who “came out” to me, indicating their sexual orientation as being “homosexual” or “bisexual.”	172	57.0	130	43.0
I have had a college course or high school course dealing exclusively with diversity and multicultural issues, including sexual orientation.	130	43.0	172	57.0
I believe that having an understanding of homosexuality is important in my professional development since I may be working directly with people who are homosexual.	253	83.8	47	15.6

Data Collection

After institutional approval for conducting research was granted (see Appendix A) and permission received from the other three universities, a standardized administration procedure was conducted in teacher education classes (e.g., Childhood Development, Adolescent Development, Educating Students with Special Needs) within the first four weeks of the Fall 2002 semester. Prior to data collection, the contact personnel at each of the four universities were trained in the standardized administration procedures included in Appendix A. After the individuals were trained, the packets of questionnaires were screened for errors and delivered to each of the contact people at the universities. Permission by the contact personnel was obtained from the various university instructors to enter their classrooms at specified times and administer the questionnaire packets. The contact personnel or their assistants administered the packets within two weeks of receipt. The standardized administration procedures (see Appendix B) were read to each group prior to administration of the questionnaires. The contact person and/or his or her assistants conducted the administration during the first four weeks of the Fall 2002 semester.

As part of data collection, participants were asked to read and sign a consent form (see Appendix C). The consent form contained the instructions for this study, the purposes and implications of the study, safeguard procedures for participant confidentiality and privacy, knowledge of voluntary participation, and the knowledge that participants may revoke consent at any time. The contact information for this researcher, this researcher's university supervisor, and the respective Institutional Review Board secretary at the participating university was included on the consent form. Participants

were asked to sign two consent forms, one for the participant to keep for his or her records and one for this researcher to keep.

Participants received a survey packet consisting of the following forms: A vignette (randomized) (see Appendix D), an examiner-made attitudes rating scale (ETAH) (see Appendix E), and a demographic sheet (see Appendix F). The following scales were presented in a randomized order for counter-balancing purposes: Right-Wing Authoritarianism Scale (see Appendix G), Social Dominance Orientation Scale (see Appendix H), and the Bem Sex-Role Inventory. All of the measures (except for the demographic sheet) were responded to in a Likert-type scale and each measure began on a separate sheet of paper. To avoid possible bias in responding to the individual items, the titles of the scales were not included in the participant's packet.

Once the researcher received the packets, the data were screened for completeness and entered into the SPSS-11 statistical package for data analysis. Three hundred and eight questionnaire packets were received from the contact personnel at the various universities. Six packets contained highly unusual or incomplete responses and were excluded from this study. A total of 302 subject packets were available for data analysis.

Measures

The Evaluation of Teacher's Attitudes toward Homosexuality (ETAH) (see Appendix E) is an examiner-made instrument consisting of 26 statements relating to the vignette presented to the particular subject. The statements that assess teacher discrimination are derived from many different research instruments and from the literature, which has demonstrated good evidence of predictive validity for expressions of

attitudes (Cruce, M., Stinnett, T. & Choate, 2003). The 26 scoreable items has a 4 point Likert-type scale (4 = *strongly agree*, 3 = *agree*, 2 = *disagree*, 1 = *strongly disagree*). Reverse scored items were recoded and responses to each of the statements were summed to give the subject an overall attitude score. The higher the score, the more positive the attitude toward the gay or lesbian student. Initial reliability through internal consistency was gathered prior to formal data collection on a small sample of pre-service teachers with a Cronbach alpha of .89.

Authoritarianism was measured with Altemeyer's (1996) Right-Wing Authoritarianism Scale (see Appendix G). The RWA Scale consists of 30 scoreable items and has demonstrated high degrees of reliability (Cronbach alphas: .82 to .87) and construct validity (Altemeyer, 1988, 1996; Christie, 1991). This instrument utilizes a 9 point Likert-type scale (-4 = *very strongly disagree*, -3 = *strongly disagree*, -2 = *moderately disagree*, -1 = *slightly disagree*, 0 = *neutral*, +1 = *slightly agree*, +2 = *moderately agree*, +3 = *strongly agree*, +4 = *very strongly agree*). Reverse scored items were recoded before data analysis. The first four items on the scale are not scored to allow for the subject to become used to using the 9 point Likert-type scale; however, scores on the last 30 items were summed to provide an overall score for each subject. Higher scores indicate higher levels of authoritarianism in the subject examined.

Social Dominance Orientation was measured with Pratto and colleague's (1994) Social Dominance Orientation (SDO) Scale (see Appendix H). The SDO Scale consists of 16 items such as "Some groups of people are simply inferior to other groups" and "No one group should dominate in society (reversed scored)". This scale utilizes a 10 point Likert-type scale (anchors: 0 = *disagree strongly*, 5 = *neither agree nor disagree*, 10 =

agree strongly). Reverse scored items were recoded prior to data analysis and the scores on each item were summed to provide an overall score for each subject. This scale has also been found to have high degrees of reliability and construct validity, with internal consistency (Cronbach alpha) coefficients ranging from .88 to .94 (Pratto, Sindanius, Stallworth, & Malle, 1994; Whitley, 1999). Higher scores indicate a higher social dominance orientation.

The gender-role identity of each subject was measured with the Bem Sex-Role Inventory (Bem, 1977). The Bem Sex-Role Inventory consists of 60 adjectives describing a variety of behaviors and the subjects are asked to respond how well the adjective describes them only, not the ideal male or female. Based upon their responses concerning their own perceptions, the subjects can be classified as having one of five gender-role orientations along a continuum: masculine, near masculine, androgynous, near feminine, or feminine (Bem, 1977). The Bem Sex-Role Inventory is a well-researched instrument that has demonstrated high degrees of reliability and validity in literature (e.g., Hyde, 1985; Spence & Helmreich, 1978). The scores for 20 items describe stereotypical masculine traits and the scores for another 20 items describe stereotypical feminine traits. The other 20 items describe fairly neutral traits common to both genders. The masculine and feminine traits are summed and an average is taken for each scale. The feminine score is subtracted from the masculine score and an overall gender identity score is obtained. Categories were assigned to each subject depending on the score obtained. Scores less than or equal to -1.0 indicated a masculine identity. Scores between -1.0 and -0.5 indicated a near masculine identity. Scores between -0.5 and $+0.5$ indicated an androgynous identity. Scores between $+0.5$ and $+1.0$ indicated a near feminine identity.

Scores greater than or equal to +1.0 indicated a feminine identity (Bem, 1977; Hyde, 1985).

Research Questions Analyzed

The following two research questions and null hypotheses were examined in this study.

Research Question #1: In what ways do labels and behaviors affect pre-service teachers' attitudes toward gay and lesbian youth?

Null Hypothesis #1 (Ho1): Mean scores on the Evaluation of Teacher Attitudes towards Homosexuality (ETAH) between the four groups of subjects divided by male/female, labeled/nonlabeled vignettes will not be significantly different.

Research Question #2: In what ways are the correlates underlying attitudes toward homosexuality (gender-role orientation, level of authoritarianism, social dominance orientation) related to the overall attitude scores of pre-service teachers?

Null Hypothesis #2 (Ho2): The estimated population covariance matrix generated by the examiner-developed model is not consistent with the sample covariance matrix.

Data Analysis

Analysis of Variance

The first research question concerning effects of a label or no label on the attitudes toward gay and lesbian youth was answered with a 2 X 2 between-subjects analysis of variance (ANOVA). If there are significant differences between groups on the

mean scores on the Evaluation of Teachers' Attitudes toward Homosexuality (ETAH Scale), direct interpretations about the label and the gender of the target can be made.

Structural Equation Modeling

The main focus of this study is the underlying constructs surrounding attitudes toward homosexuality. The covariances for each of the variables will form the SEM(s) utilizing the a priori model (See Figure 1). The residuals from the SEM represent the residual covariances, which will be small and centered around zero, if the model is a close fit. Utilizing a chi-square statistic, a comparison will be made to the independence model and, if statistically significant, H_0 cannot be rejected. If large residuals are found, an examination of the fit indices may indicate additional paths needed to give the model a better fit, if consistent with current theory and scientific literature. The paths will be added until H_0 can be rejected.

Limitations to the Study

1. The generalizability of this study's findings is limited due to the participant pool consisting of current teachers-in-training at only four universities. In addition, this sample may not represent the greater variance of the particular demographic variables found in the nationwide population of pre-service teachers.

2. This study relies upon each participant's self-report concerning his or her attitudes toward homosexual youth, right wing authoritarianism, social dominance orientation, and gender role. There was no other independent verification of these attitudes in the subject pool.

CHAPTER 4

RESULTS

Chapter Summary

This chapter presents the results of this study. The means and standard deviations of subject's overall scores on each of the instruments utilized in the study were calculated. The reliability and correlation of the scales used in this study are presented. A factor analysis provides evidence of construct validity on an examiner-made instrument. Finally, the ANOVA and SEM to test this study's hypotheses are outlined.

Means and Standard Deviations

Prior to formal data analysis, all reversed scored items on each of the four scales were recoded into the SPSS-11 statistical package. Screening of the data included replacing missing values on the items of the scales with the means or a linear estimation with nearby points. Scores on the Right-Wing Authoritarianism Scale (RWA Scale) and the Social Dominance Orientation Scale (SDO Scale) were recoded to set each individual item's lowest score to 1. The total scores on each of the four scales were summed and computed. Upon examination of the scatterplots and through the use of regression analysis, there were no significant outliers or unusual responses contained in the final 302 subjects participating in this study.

The Right-Wing Authoritarianism Scale (RWA Scale) total mean score was 83.63 with a standard deviation of 47.43. See Appendix I for a summary of means and standard deviations for the items contained on this instrument. The Social Dominance Orientation Scale (SDO Scale) total mean score was 57.13 with a standard deviation of 23.55. See Appendix J for a summary of means and standard deviations for the items contained on this instrument. The Bem Sex Role Inventory total mean score was -0.10 with a standard deviation of .80. See Appendix K for a summary of means and standard deviations for the items contained on this instrument. The Evaluation of Teachers' Attitudes toward Homosexuality (ETAH Scale) total mean score was 83.26 with a standard deviation of 9.13. See Appendix L for a summary of means and standard deviations for the items contained on this instrument. Table 11 provides a summary of the means and standard deviations of each of the four scales utilized in this study.

Table 11

Means and Standard Deviations of Right-Wing Authoritarianism Scale (RWA Scale), Social Dominance Orientation Scale (SDO Scale), Bem Sex Role Inventory (Bem), and the Evaluation of Teachers' Attitudes toward Homosexuality (ETAH) (N = 302)

Scale	<i>M</i>	<i>SD</i>
RWA	83.63	47.43
SDO	57.13	23.55
Bem	-0.10	0.80
ETAH	83.26	9.13

Reliability Analysis

Correlation and Internal Consistency

All instruments utilized in this study obtained adequate to high levels of internal consistency. The first 40 items on the Bem Sex Role Inventory (masculine and feminine scales), the last 30 items on the Right-Wing Authoritarianism Scale (RWA Scale), all items on the Social Dominance Orientation Scale (SDO Scale), and all items on the Evaluation for Teachers' Attitudes toward Homosexuality (ETAH) were each subjected to a reliability analysis. In addition, a correlational analysis was computed for each of the four instruments used in this study.

The Right-Wing Authoritarianism Scale (RWA Scale) had a high internal consistency as measured by a standardized Cronbach alpha of .96 (alpha = .96). The Social Dominance Orientation Scale (SDO Scale) had a high internal consistency as measured by a standardized Cronbach alpha of .87 (alpha = .86). The Bem Sex Role Inventory (Bem) had a high internal consistency as measured by a standardized Cronbach alpha of .84 (alpha = .81). The Evaluation of Teachers' Attitudes toward Homosexuality (ETAH) had a high internal consistency as measured by a standardized Cronbach alpha of .91 (alpha = .90). The Pearson correlations between the RWA Scale and the SDO Scale were positively correlated and both scales were negatively correlated with the ETAH scale ($p < .001$). However, as hypothesized, the Bem was not correlated with the RWA Scale or the ETAH scale ($p > .10$) and only moderately correlated with the SDO Scale ($p < .003$). Table 12 provides a summary of the reliability and correlational indices for each of the instruments used in this study.

Table 12

Reliability and Correlational Indices for the Right-Wing Authoritarianism Scale (RWA), the Social Dominance Orientation Scale (SDO), the Bem Sex Role Inventory (Bem), and the Evaluation of Teachers' Attitudes toward Homosexuality (ETAH) (N = 302)

Scale	RWA	SDO	Bem	ETAH
RWA	.96			
SDO	.41*	.87		
Bem	.09	-.17*	.84	
ETAH	-.66*	-.48*	-.05	.91

Note. Standardized alpha values shown above the diagonal.

* $p < .003$

Construct Validity of the ETAH Scale

To evaluate its construct validity, the items contained on the Evaluation of Teachers' Attitudes toward Homosexuality Scale (ETAH) were submitted to a factor analysis. Principal components extraction with varimax rotation was performed through SPSS-11 on the 26 items contained on this instrument using the 302 participants in the subject pool. Prior to the principal factors extraction, the factorability of the correlation matrix was examined.

The factorability of the correlation matrices was determined through the use of the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity. The

high value of Kaiser-Meyer-Olkin measure of sampling adequacy (.933) indicates that the partial correlations between the 26 items are large. Examining Bartlett's test of sphericity revealed that the correlation matrix between the 26 items is significant (χ^2 (325, $N = 302$) = 3174.134, $p < .001$), indicating the correlation matrix is not an identity matrix and contains more than one factor.

Upon initial extraction and rotation, five factors with an eigenvalue greater than 1 were extracted explaining 56.47% of the overall variance. An examination of the correlation matrix, the factor loadings, the scree plot and the prior hypothesized factor structure of the instrument indicated that three factors best explain the overall factor structure of the scale. A final extraction and orthogonal rotation when three factors are forced explained 48.30% of the overall variance of the instrument. Appendix M provides a summary the factor loadings and the scree plot of the final extraction on the Evaluation of Teachers' Attitudes toward Homosexuality scale.

Analysis of Variance

In what ways do labels and behaviors affect pre-service teachers' attitudes toward gay and lesbian youth?

The 302 subjects in this study were randomly assigned to one of four groups of vignettes: Gay male (Label/No Label) and Lesbian (Label/No Label) (See Figure 2). All subjects had an equal chance of receiving any one of the four vignettes.

		GENDER	
		MALE	FEMALE
HOMOSEXUAL	NON-LABELED	N = 76	N = 76
	LABELED	N = 75	N = 75

Figure 2. Distribution of vignettes among subjects.

The means and standard deviations on the Evaluation of Teachers' Attitudes towards Homosexuality (ETAH) for each group were obtained as part of the preliminary calculations for the analysis of variance. The Male/No Label group obtained a mean of 83.09 and a standard deviation of 9.25. The Female/No Label group obtained a mean of 83.35 and a standard deviation of 8.84. The Male/Label group obtained a mean of 84.19 and a standard deviation of 9.23. The Female/Label group obtained a mean of 83.88 and a standard deviation of 9.35. Table 13 provides a summary of the means and standard deviations for each group of subjects.

Table 13

Means and Standard Deviations of the Subject Groups on the Evaluation of Teachers' Attitudes towards Homosexuality (ETAH) Scale (N = 302)

Group	<i>n</i>	<i>M</i>	<i>SD</i>
Male/No Label	76	83.09	9.25
Female/No Label	76	83.35	8.84
Male/Label	75	84.19	9.23
Female/Label	75	83.88	9.35
Total	302	83.63	9.13

The data were then subjected to a two-way analysis of variance to determine if there were significant differences between the means of the four groups. This would test the null hypothesis that the mean scores on the Evaluation of Teacher Attitudes towards Homosexuality (ETAH) between the four groups of subjects divided by male/female, labeled/nonlabeled vignettes will not be significantly different. The Levene statistic revealed homogeneity of variance, $F(3, 298) = .441, p = .724$. The analysis of variance did not reveal a significant difference between the means, $F(3, 298) = 0.223, p = .881$. Therefore, H_0 could not be rejected. Table 14 provides the ANOVA summary of the analysis.

Table 14

ANOVA Table to Test H₀₁

Source	Sum of Squares	df	Mean Square	F
Between Groups	56.17	3	18.72	.223 ^a
Within Groups	25057.32	298	84.09	
Total	25113.49	301		

^a $p = .881$

Structural Equation Modeling

In what ways are the correlates underlying attitudes toward homosexuality (gender-role orientation, level of authoritarianism, social dominance orientation) related to the overall attitude scores of pre-service teachers?

Because there were not significant differences between the means of the four groups, the entire data set of 302 participants was entered into the AMOS 4 statistical package. Figure 1 provides a summary of the initial structural equation model used for the analysis. The data set consisting of the useable participant scores was run with the AMOS 4 statistical package. Minimization was achieved with 9 iterations. Appendix N provides the covariance matrix utilized for this analysis. The independence model which tests the hypothesis that the variables are uncorrelated with one another was rejected, $\chi^2(15, N = 302) = 416.01, p < .001$. The initial model significantly improved the fit when compared to the independence model. However, when evaluating the chi-square and

comparative fit index (CFI), minimal support could be found for the hypothesized model, $\chi^2 (9, N = 302) = 51.17, p < 0.001, CFI = 0.90$. Therefore, Ho2 was rejected.

Post-hoc model modifications were performed on the initial model in an attempt to develop a better fitting, more parsimonious model. Upon examination of the fit indices and theoretical relevance, a prediction path was added between the latent factor of gender role and the total score on the Social Dominance Orientation Scale (SDO Scale). This implies that gender role predicts the individual's Social Dominance Orientation. Modified SEM model 1 was submitted to another analysis through the AMOS 4 statistical package. This significantly improved the fit of the obtained data, $\chi^2 (8, N = 302) = 20.29, p = 0.009, CFI = 0.97$.

Upon examination of the fit indices and theoretical relevance, a prediction path was added between the question, "knowing someone who 'came out'" and the latent factor, gender role. This would imply that knowledge of a gay or lesbian individual would predict a person's gender role. Modified SEM model 2 was submitted to another analysis through the AMOS 4 statistical package. This significantly improved the fit of the obtained data $\chi^2 (7, N = 302) = 15.35, p = 0.032, CFI = 0.98$.

Upon examination of the fit indices and theoretical relevance, a covariance path was added between the error of the overall ETAH total score and the error of the Bem Sex-Role Inventory. This path correlates the part of the ETAH total score and the part of the Bem Sex-Role category that are not common to the gender role latent factor. The final SEM model was submitted to an analysis through the AMOS 4 statistical package. This significantly improved the fit of the obtained data, $\chi^2 (6, N = 302) = 11.11, p = 0.085, CFI = .99$. The final SEM model obtained a standardized root mean square residual (SRMR)

of 0.0446, a desired value for good fitting model. Based upon this final model, two percent of the variance was associated with the gender role latent variable, thirteen percent of the variance was associated with the attitudes toward homosexuality latent variable, and seventy-seven percent of the variance was associated with the ETAH Scale (i.e., expression of attitudes). Table 15 provides a summary of the models tested, degrees of freedom, its chi-square value, CFI value, SRMR value, and the goodness-of-fit index (GFI). Figure 3 presents the final SEM model obtained from the data with the significant coefficients presented in standardized form.

Table 15

Comparison of Models for SEM

Model	χ^2	<i>df</i>	χ^2/df	CFI ^a	GFI ^b	NFI ^c	RFI ^d	IFI ^e	TLI ^f	SRMR ^g
Initial	51.17	9	5.69	.90	.95	.88	.80	.90	.83	.0811
1	20.29	8	5.78	.91	.95	.89	.79	.91	.82	.0474
2	15.35	7	2.19	.98	.98	.96	.92	.98	.96	.0518
Final	11.11	6	1.85	.99	.99	.97	.93	.99	.97	.0446

Note. ^aCFI = comparative fit index, ^bGFI = goodness of fit index, ^cNFI = normed fit index, ^dRFI = relative fit index, ^eIFI = incremental fit index, ^fTLI = Tucker-Lewis index, ^gSRMR = standardized root mean square residual

Key: E1 – E7 = Error terms for the dependent variables
 D1 – D2 = Distortion terms for the latent variables

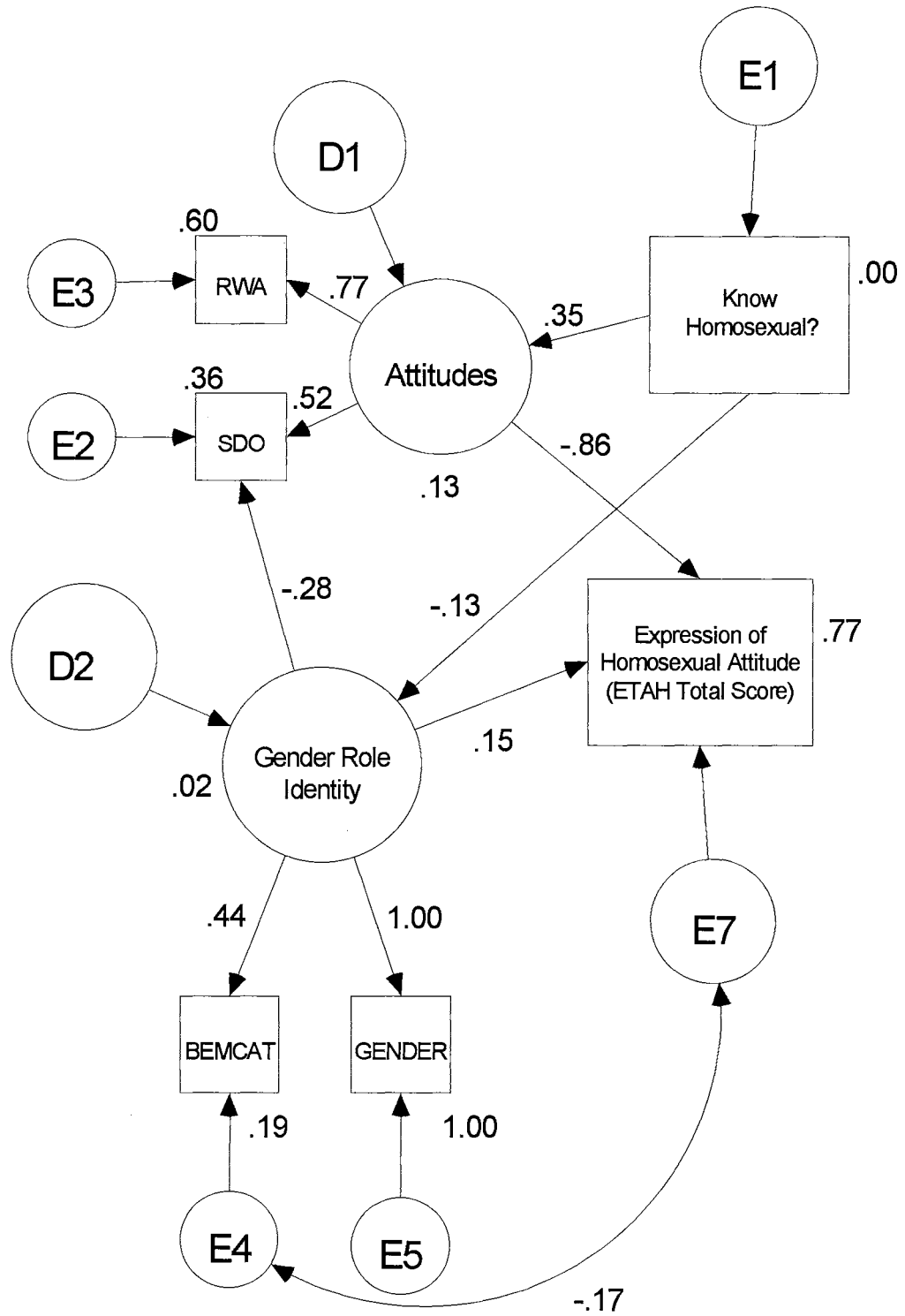


Figure 3. Final SEM Model

CHAPTER 5

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

The following chapter contains a summary of the results of this study, limitations of this study, a discussion based upon these results and recommendations for future research.

Summary

This study examined the differences of reactions in future teachers toward a gay or lesbian student and the underlying correlates determining these reactions. The three hundred and two future teachers who participated in this study were randomly selected from four universities in the Mid-Western and Southern sections of the United States. A majority of the subjects were Caucasian females in their early twenties. A significant number of these subjects were single or never married and classified themselves as juniors in their university training program. Many of the subjects graduated from high schools located in the Mid-Western or Southern sections of the United States. A majority of subjects were in the regular education training track of their university program and planned to teach at the elementary level upon graduation and certification.

The three scales utilized in this study, the Right-Wing Authoritarianism (RWA) Scale, the Social Dominance Orientation (SDO) Scale, and the Bem Sex-Role Inventory (Bem), contained adequate levels of reliability as measured through an analysis of internal consistency. The high level of internal consistency found in each of these

measures supports the past literature regarding their reliability (e.g., Altemeyer, 1988, 1996; Bem, 1977; Christie, 1991; Hyde, 1985; Pratto, Sindanius, Stallworth, & Malle, 1994; Spence & Helmreich, 1978; Whitley, 1999). In addition to each measure's reliability, the correlation between these scales was also similar to findings in past research (Oliver & Hyde, 1993; Whitley, 1998, 1999; Whitley & Kite, 1995). The reliability analysis and correlations of the RWA Scale, the SDO Scale, and the Bem continue to support further evidence of the use of these scales in researching differences in individuals' attitudes toward homosexuality.

The researcher-created Evaluation of Teachers' Attitudes toward Homosexuality (ETAH) Scale was also highly reliable and correlated with the other three measures used in this study as predicted. The correlations indicate moderate association between the RWA Scale and SDO Scale and no association with the Bem. Therefore, the ETAH Scale appears to be associated more with the authoritarian level and social dominance level of the subject rather than his or her society-prescribed gender-role. In addition to its reliability, the underlying factor structure of this scale provided evidence of validity concerning the constructs which were hypothesized to make up this measure as gleaned from the literature. Thus, this scale was reliably utilized with the pre-service teachers participating in this study as a measure associated with the expression of attitudes toward a gay or lesbian student.

The first hypothesis examined the way a label of homosexuality could effect the expression of attitudes toward gay or lesbian students in future teachers. The finding of this hypothesis did not reveal differences in the expression of these attitudes among the four groups as measured by the ETAH Scale. Therefore, it does not appear that assigning

a label of homosexuality affected the subject's attitude toward the student any more than simply observing gender-opposite behaviors. Previous literature has not specifically focused on the effects of labeling homosexual individuals, but on specific types of social groupings associated with the target, such as gender, race, ethnicity, and medical labels (Cruce, Stinnett, & Choate, 2003; Darley & Fazio, 1980; Fiske & Neuberg, 1990; Grant & Holmes, 1981; Hamilton, Sherman, & Ruvolo, 1990; Krueger & Rothbart, 1988; Rosenham, 1973). The implication of this finding could mean that future teachers attribute the same attitudes toward labeled gay or lesbian youth that they would attribute to a student who has gender-opposite behaviors and no label. However, all participants were exposed to the same standardized procedures that specified that this study was examining sexual orientation. This exposure could have biased the subject's responses to the ETAH Scale, regardless of the vignette the subject received. Further study is needed to eliminate the possibility of this contamination by having the first exposure to the label or behavior occur when the subject receives his or her research packet.

The second hypothesis examined the underlying correlates related to the expression of attitudes toward the gay or lesbian student. The findings from this study indicate that the examiner-made, a priori model built to describe this structure of attitudes was not an adequate hypothesis for the data obtained from the future teacher subject pool. However, by adding three additional paths to the model, an adequate fit was obtained for interpretation. The model indicates that 77% of the variance associated with the expression of attitudes toward gay or lesbian students on the ETAH Scale can be attributed to the combination and multivariate covariation of the variables studied. Specifically, the latent factors of Gender Role and Attitudes toward Homosexuality

significantly predicted the scores on the ETAH Scale. In addition, support is obtained from previous studies linking the subject's gender role to the expression of attitudes toward homosexual individuals (e.g., Deaux & Kite, 1987; Kite, 1994; Oliver & Hyde, 1993; Whitley & Kite, 1995). Moreover, the knowledge of a gay or lesbian individual tended to moderate the effects of the latent factors on the scores of the ETAH Scale, which supports previous research of this particular moderator variable (Sidanius & Pratto, 1993; Sidanius, Pratto, & Bobo, 1994; Whitley, 1999). This implies that the underlying latent variables of gender role and attitudes toward homosexuality are modified by this knowledge before the expression of these attitudes is exhibited toward a gay or lesbian student. In addition, previous literature also discusses the moderation of Social Dominance Orientation by a person's gender-role (Oliver & Hyde, 1993; Whitley & Kite, 1995). An implication of this finding is that a person's willingness to dominate other groups may be modified by his or her perceived gender-role expectations. These variables and their associations provide significant improvement over previous findings in which only half of the variance could be associated with a combination of scores from the RWA Scale and the SDO Scale (Whitley, 1998, 1999). However, the overall implication of the current study is that important information and predictions may get lost if a study's design does not include an analysis of how these variables covary, moderate, and predict each other. Not only does this study support past literature on the subject of prejudice toward homosexuals, it also provides evidence that a unique combination of these variables can be estimated and interpreted within the specific population of future teachers. This can have significant implications to theory, research, and practice within the study of discrimination. These implications of these findings will be discussed

following the general limitations within this study and finally, future directions for the area.

Limitations

1. The generalizability of this study's findings is limited due to the participant pool consisting of current teachers-in-training at only four universities. In addition, this sample may not represent the greater variance of the particular demographic variables found in the nationwide population of pre-service teachers.

2. This study relies upon each participant's self-report concerning his or her attitudes toward homosexual youth, right wing authoritarianism, social dominance orientation, and gender role. There was no other independent verification of these attitudes in the subject pool.

Discussion

Whitley and Kite (1995) state that "additional work is needed to fully explore the theoretical basis for antigay prejudice. Only through increased conceptual understanding of the basis of prejudice can one hope to eliminate it" (p. 152). Other studies have also called for the development of an underlying model to explain individuals' attitudes toward homosexuality (Oliver & Hyde, 1993; Whitley, 1999). Past research has indicated that Right-Wing Authoritarianism and Social Dominance Orientation moderately predict the attitudes toward homosexuals and other minority groups in a variety of population samples (Haddock, Zanna, & Esses, 1993; Whitley, 1998, 1999). Gender-Role Orientation has also been described as predicting attitudes toward homosexuals in many

samples, especially college samples (Deaux & Kite, 1987; Kite, 1994; Oliver & Hyde, 1993; Whitley & Kite, 1995). Therefore, Right-Wing Authoritarianism, Social Dominance Orientation and Gender-Role Orientation were studied as they relate to attitudes toward perceived or labeled homosexual students in pre-service teachers.

Teachers create the psychological framework in their classroom that allows learning to take place. The attitudes and interpersonal relationships teachers have toward the students in their classrooms can make important differences in the lives of all their students. However, because teachers will come into contact with a variety of children and adolescents, these teachers are susceptible to the bias that takes place when they label their students (Cruce, Stinnett, & Choate, 2003; Stinnett, Cruce, & Choate, in press). This bias modifies the teacher's behavior toward the target student, either positively or negatively, depending on the underlying correlates associated with the label. When the teacher perceives a student's behavior as being different than the expected gender-role of the student's biological sex, the assumption of the teacher is that the student is a homosexual. Thus, it is possible that the teacher could treat this student differently than other students in his or her class because of this assumption. This study supported the conclusion that whether the student is labeled or an assumption is required on the part of the teacher, the expression of the attitudes of future teachers will be similar. In addition, it did not appear that the gender of the target played an important part in this expression; that is, the level of prejudice was the same toward a gay or lesbian target student. In examining these biases in labeling in future teachers, it becomes important to examine the underlying correlates associated with these attitudes.

Bronfenbrenner's (1995) ecological theory involves a complex series of environmental systems that impact the development of individuals. This particular theory has not been studied in the context of developing homosexual individuals; that is, no scientific literature could be found that studied specific aspects of gay and lesbian youth within the sociocultural systems Bronfenbrenner has described. Teachers and educational institutions make up a significant portion of the microsystem directly influencing the development of all individuals. The reciprocal relationship between the microsystem and the developing individual interacts with higher systems in Bronfenbrenner's model, such as those associated with the attitudes and ideologies of the culture and sociohistorical conditions (Bronfenbrenner, 1995). The negative responses homosexual youth experience on a daily basis serve to perpetuate the pathology and acting out behaviors in them, including self-devaluation (e.g., Patterson, 1995; Savin-Williams & Rodriguez, 1993), conflict with the law, substance abuse, prostitution, and suicide (e.g., Henning-Stout, James, & Macintosh, 2000; Pilkington & D'Augelli, 1995; Savin-Williams, 1994).

Because of the reciprocal nature within Bronfenbrenner's model, it becomes important not only to study the reactions homosexual youth endure, but the environmental contexts (i.e., school personnel) that influence these reactions. The sociohistorical aspects have long included homosexuals as legitimate targets of attack, both verbal and physical (Herek, 1991). The developing gay or lesbian student in school must face cruel and demeaning treatment from their peers and teachers on a daily basis (Wells, Lasser, & Tharinger, 1997). These students are more likely than their heterosexual counterparts to miss school due to fear, being threatened by other students, and having their property damaged (Garofalo, Wolf, Kessel, Palfrey, & Du Rant, 1998).

Recently, legal (*Nabozny v. Podlesny*, 1995/1996; Safe Schools Coalition of Washington, 1999) and ethical (APA, 1992; Governor's Commission on Gay and Lesbian Youth, 1993; NASP, 1992) issues have surfaced that require school psychologists, administrators and teachers to protect the safety and rights of all students, regardless of the perceived or labeled sexual orientation of each student. Because of these reasons, it becomes important to develop a theoretical model influencing the attitudes future school personnel have towards homosexual students.

The current study utilized a representative sample of future teachers in the South and Mid-West, a majority of which will be in the classroom teaching in one or two years. Research has been lacking in the role teachers play within the educational environment of the homosexual individual. Researchers have debated over which variables contribute most to understanding the underlying causes affecting an individual's attitude toward homosexuality, including the target's deviance from societal gender roles (Oliver & Hyde, 1993; Whitley & Kite, 1995) and cognitive constructs associated with prejudice toward homosexuals (Altemeyer, 1988, 1996, 1998; Pratto, Sidanius, Stallworth, & Malle, 1994; Whitley, 1998, 1999). The interactions and reciprocity between these correlates have also not been well studied to date. This study provided evidence that supports the continued development of a more interactive and dynamic theory, such as Bronfenbrenner's bioecological theory (1995) and Bandura's reciprocal influences theory (1977, 1986, 1995, 1997), to explain these negative expressions of attitude within the educational environment. Through the development of more powerful statistical procedures, it becomes possible to study these cognitive and socio-cultural correlates

together by examining the multivariate covariance within and between measured constructs.

Many studies have utilized correlational statistics to associate these correlates; in particular, Right-Wing Authoritarianism and Social Dominance Orientation. This particular research has determined that half of the negative attitudes toward homosexuality can be explained by these two constructs (Whitley, 1999; Whitley & Kite, 1995). In separate studies, Gender-Role Orientation has been linked to negative attitudes toward homosexuals utilizing the same types of correlational procedures, although to a much less degree than Right-Wing Authoritarianism and Social Dominance Orientation (Oliver & Hyde 1993). Debates have emerged regarding these two mindsets as what should be studied in individuals who discriminate against homosexuals (Oliver & Hyde, 1993; Whitley & Kite, 1995). Utilizing statistical techniques in this study that use the covariances rather than the correlations between measures reveal how the seemingly unassociated constructs of authoritarianism and social dominance, and gender role orientation can interact. In other words, this study supported the use of all three constructs when examining the underlying structure of attitudes toward homosexuality.

In addition to methodological modifications to this subject, the application into educational practice becomes important to examine. This study supported the idea that there are significant modifiers in the expression of attitudes toward homosexuality. Among these modifiers are the knowledge of a gay or lesbian individual. Not only does this appear to affect the attitudes, but also an individual's perception of their own gender-role orientation. In other words, it changes an individual's perception of "masculine" and "feminine" behavior and, by doing so, modifies the individual's desire to dominate other

social groups, specifically homosexual groups. By exposure to a gay or lesbian individual, future teachers may be less likely to exhibit and express negative attitudes toward their homosexual students. Thus, by exposing future teachers to gay or lesbian individuals in their university training program, they may improve their treatment to gay or lesbian students in their classroom.

Recommendations

Future research in teachers' attitudes toward homosexual youth is recommended, especially utilizing the variables of Right-Wing Authoritarianism, Social Dominance Orientation, Gender-Role Orientation, and knowledge of a homosexual individual. However, because of the lower reliability associated with the Bem Sex-Role Inventory, another, more reliable measure could be developed and tested to determine the Gender-Role Orientation of the participants in the study. Utilizing the final SEM model in this study, additional subjects from a wider variety of universities and within the public school classroom across the United States can be solicited to increase the generalizability of this underlying model of discrimination. This would have the advantage of pooling a much larger assortment of ethnic diversity and a much larger geographic sample. In so doing, this will provide increased support for the theoretical model underlying the construct of attitudes toward homosexuality in future teachers as well as teachers in practice.

In addition, further modifications can be made to the ETAH Scale to improve the reliability, factor structure, and validity of the instrument for research purposes. By utilizing factor scores of the ETAH Scale and the other measures associated with these

constructs, a further breakdown of more specific constructs within these correlates could be provided to improve the theoretical model. It is also recommended that further experimental research into these attitudes toward homosexuality within pre-service teachers be studied to incorporate specific recommendations for higher education curriculum modifications that can successfully improve these attitudes. In addition, longitudinal studies can be initiated that follows the pre-service teacher into practice and determine if classroom experience modifies these attitudes.

Since a research link has been established in this study for utilizing Right-Wing Authoritarianism, Social Dominance Orientation, Gender-Role Orientation, and the knowledge of a gay or lesbian individual, future studies should incorporate these variables into the paradigms of underlying constructs of attitudes toward homosexuality. In so doing, future directions for this research should seek to improve the development of the homosexual individual from an ecological perspective and improve the context in which they must develop. This not only includes a study of the educational environment, but the other influences within Bronfenbrenner's model, such as the media, family, and peers.

REFERENCES

- Adams, H.E., Wright, Jr., L.W., Lohr, B.A. (1996). Is homophobia associated with homosexual arousal? *Journal of Abnormal Psychology, 105*, 440-445.
- Adorno, T.W., Frenkel-Brunswik, E., Levinson, D.J., & Sandford, R.N. (1950). *The authoritarian personality*. New York: Harper & Row.
- Altemeyer, B. (1981). *Right-wing authoritarianism*. Winnipeg, Ontario, Canada: University of Manitoba Press.
- Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco: Jossey-Bass.
- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.
- Altemeyer, B. (1998). The other "authoritarian personality." *Advances in Experimental Social Psychology, 30*, 47-92.
- American Psychological Association. (1992). Ethical principles of psychologists and code of conduct. *American Psychologist, 47*, 1597-1611.
- Ashmore, R.D. & Del Boca, F.K. (1981). Conceptual approaches to stereotypes and stereotyping. In D.L. Hamilton (Ed.), *Cognitive processes in stereotyping and intergroup behavior* (pp. 1-35). Hillsdale, NJ: Erlbaum.
- Bandura, A. (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. *Journal of Personality and Social Psychology, 1*, 589-595.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, N.J.: Prentice Hall.

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, N.J.: Prentice Hall.
- Bandura, A. (1991). Social cognitive theory of moral thought and action. In W.M. Kurtines & J.L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. 1). Hillsdale, N.J.: Erlbaum.
- Bandura, A. (1994). Social cognitive theory of mass communication. In J. Bryant & D. Zillman (Eds.), *Media effects*. Hillsdale, N.J.: Erlbaum.
- Bandura, A. (1995). (Ed.). *Self-efficacy in changing societies*. New York: Cambridge University Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of self-control*. New York: W.H. Freeman.
- Bell, A.P., Weinberg, M.S., & Hammersmith, S.K. (1981). *Sexual preference: Its development in men and women*. Bloomington: Indiana University Press.
- Bem, S. (1977). On the utility of alternative procedures for assessing psychological androgyny. *Journal of Consulting and Clinical Psychology*, 45, 196-205.
- Brigham, J.C. (1971). Ethnic stereotypes. *Psychological Bulletin*, 76, 15-38.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723-742.
- Bronfenbrenner, U. (1995). The bioecological model from a life course perspective. In P. Moen, G.H. Elder, & K. Luscher (Eds.), *Examining lives in context*. Washington, D.C.: American Psychological Association.

- Bronfenbrenner, U. & Morris, P.A. (1997). The ecology of developmental processes. In R.M. Lerner (Ed.), *Handbook of child psychology* (5th Ed., Vol. 1). New York: Wiley.
- Broverman, I., Vogel, S., Broverman, D., Clarkson, F., & Rosenkranz, P. (1972). Sex-role stereotypes: A current appraisal. *Journal of Social Issues*, 28, 59-78.
- Buckel, D. (1996). *Stopping anti-gay abuse of students in public high school: A legal perspective*. New York, NY: Lambda Legal Defense and Education Fund.
- Canter, M.B., Bennett, B.E., Jones, S.E., & Nagy, T.F. (1994). *Ethics for psychologists: A commentary on the APA ethics code*. Washington, D.C.: American Psychological Association.
- 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 Press.
- Cicchetti, D., & Toth, S.L. (1998). The development of depression in children and adolescents. *American Psychologist*, 53, 221-242.
- Cruce, M., Stinnett, T., & Choate, K. (2003). Student sexual orientation, promiscuity and urban acculturation as factors that influence teacher judgments about HIV+ students. *Psychology in the Schools*, 40, 173-182.
- Cunningham, J., Doolinger, S. J., Satz, M., & Rotter, N. (1991). Personality correlates of prejudices against AIDS victims. *Bulletin of the Psychonomic Society*, 29, 165-167.
- Darley, J.M., & Fazio, R.H. (1980). Expectancy-confirmation processes arising in the social interaction sequence. *American Psychologist*, 35, 867-881.

- D'Augelli, A.R., & Hershberger, S.L (1993). Lesbian, gay, and bisexual youth in community settings: Personal challenges and mental health problems. *American Journal of Community Psychology*, 21, 421-448.
- Davis, L., & Stewart, R. (1997, July). *Building capacity for working with lesbian, gay, bisexual, and transgender youth*. Paper presented at the conference on Working with America's Youth, Pittsburgh, PA.
- Deaux, K. & Lewis, L.L. (1987). Thinking about gender. In B.B. Hess & M.M. Ferree (Eds.), *Analyzing gender: A handbook of social science research* (pp. 92-117). Newbury Park, CA: Sage.
- Duncan, B.L. (1976). Differential social perception and attribution of intergroup violence: Testing the lower limits of stereotyping of Blacks. *Journal of Personality and Social Psychology*, 34, 590-598.
- Duncan, L.E., Peterson, B.E., & Winter, D.G. (1997). Authoritarianism and gender roles: Toward a psychological analysis of hegemonic relationships. *Personality and Social Psychology Bulletin*, 23, 41-49.
- Eagly, A.H. & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich.
- Fiske, S.T. & Neuberg, S.L. (1990). A continuum of impression formation, from category-based to individuating processes: Influences of information and motivation on attention and interpretation. In M.P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 1-74). New York: Academic Press.

- Franklin, K. (1998, August). *Psychosocial motivations of hate crimes perpetrators: Implications for educational interventions*. Paper presented at the 106th Annual Convention of the American Psychological Association, San Francisco, CA.
- Garofalo, R., Wolf, R.C., Kessel, S., Palfrey, J., & Du Rant, R.H. (1998). The association between health risk behaviors and sexual orientation among a school-based sample of adolescents. *Pediatrics*, *101*(5), 895-902.
- Gay, G. (1979). Teacher prejudice as a mediating factor in student growth and development. *Viewpoints in Teaching and Learning*, *55*, 94-106.
- Gentry, C.S. (1987). Social distance regarding male and female homosexuals. *Journal of Social Psychology*, *127*, 199-208.
- Gonsiorek, J.C., & Weinrich, J.D. (1991). The definition and scope of sexual orientation. In J.C. Gonsiorek & J.D. Weinrich (Eds.), *Homosexuality: Research implications for public policy* (pp. 1-12). Newbury Park, CA: Sage.
- Governor's Commission on Gay and Lesbian Youth. (1993). *Making schools safe for gay and lesbian youth: Breaking silence in schools and in families*. Boston, MA: Author.
- Grant, P.R., & Holmes, J.G. (1981). The integration of implicit personality theory schemas and stereotype images. *Social Psychology Quarterly*, *44*, 107-115.
- Gruskin, E. (1994, February). *A review of research on self-identified gay, lesbian, and bisexual youth from 1970-1993*. Paper presented at the meeting of the Society for Research on Adolescence.

- Haddock, G., Zanna, M.P., & Esses, V.M. (1993). Assessing the structure of prejudicial attitudes: The case of attitudes toward homosexuals. *Journal of Personality and Social Psychology, 65*(6), 1105-1118.
- Hamilton, D., Sherman, S.J., & Ruvolo, C.M. (1990). Stereotype-based expectancies: Effects on information-processing and social behavior. *Journal of social Issues, 46*, 35-60.
- Harry, J. (1989). Gay male and lesbian youth suicide. In M. Feinleib, (Ed.), *Report of the Secretary's Task Force on Youth Suicide*, Washington, D.C., Department of Health and Human Services. (Vol. 3, pp. 110-142).
- Herek, G.M. (1984). Beyond "homophobia": A social psychological perspective on attitudes toward lesbians and gay men. *Journal of Homosexuality, 10*, 1-21.
- Herek, G.M. (1986a). On heterosexual masculinity. *American Behavioral Scientist, 29*, 563-577.
- Herek, G.M. (1986b). The social psychology of homophobia: Toward a practical theory. *Review of Law and Social Change, 24*, 923-934.
- Herek, G.M. (1988). Heterosexuals' attitudes toward lesbians and gay men: Correlates and gender differences. *Journal of Sex Research, 25*, 451-477.
- Herek, G.M. (1991). Stigma, prejudice, and violence against lesbians and gay men. In J.C. Gonsiorek & J.D. Weinrich (Eds.), *Homosexuality: Research implications for public policy* (pp. 60-80). Newbury Park, CA: Sage.

- Herek, G.M. (1993). The context of anti-gay violence: Notes on cultural and psychological heterosexism. In L.D. Garnets & D.C. Kimmel (Eds.), *Psychological perspectives on lesbian and gay male experiences* (pp. 89-107). New York: Columbia University Press.
- Herek, G.M. (1996). Heterosexism and homophobia. In R.P. Cabaj & T.S. Stein (Eds.), *Textbook of homosexuality and mental health* (pp. 101-113). Washington, DC: American Psychiatric Press.
- 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.
- Henning-Stout, M., James, S., & Macintosh, S. (2000). Reducing harassment of lesbian, gay, bisexual, transgender, and questioning youth in schools. *School Psychology Review, 29*, 180-191.
- Hyde, J.S. (1985). *The psychology of women* (3rd ed.). Lexington, KY: D.C. Heath and Company.
- Jackson, L.A. & Sullivan, L.A. (1990). Cognition and affect in evaluations of stereotyped group members. *Journal of Social Psychology, 129*, 659-672.
- Jones, E.E. (1986). Interpreting interpersonal behavior: The effects of expectancies. *Science, 234*, 41-46.
- Jones, E., Farina, A., Hastorf, A., Markus, H., Miller, D., & Scott, R. (1984). *Social Stigma: The psychology of marked relationships*. New York: Freeman.

- Jussim, L., Nelson, T.E., Manis, M., & Soffin, S. (1995). Prejudice, stereotypes, and labeling effects: Sources of bias in person perception. *Journal of Personality and Social Psychology, 68*, 228-246.
- Kinsey, A.C., Pomeroy, W.B., & Martin, C.E. (1948). *Sexual behavior in the human male*. Philadelphia: Saunders.
- Kite, M.E. (1994). When perceptions meet reality: Individual differences in reactions to lesbians and gay men. In B. Greene & G.M. Herek (Eds.), *Contemporary perspectives on gay and lesbian psychology* (pp. 25-53). Newbury Park, CA: Sage.
- Kite, M.E. & Deaux, K. (1986). Attitudes toward homosexuality: Assessment and behavioral consequences. *Basic and Applied Social Psychology, 7*, 137-162.
- Kite, M.E. & Deaux, K. (1987). Gender belief systems: Homosexuality and the implicit inversion theory. *Psychology of Women Quarterly, 11*, 83-96.
- Klassen, A.D., Williams, C.J., & Levitt, E.E. (1989). *Sex and morality in the U.S.* Middletown, CT: Wesleyan University Press.
- Kohlberg, L. (1966). A cognitive-developmental analysis of children's sex-role concepts and attitudes. In E.E. Maccoby (Ed.), *The development of sex differences*. Palo Alto, CA: Stanford University Press.
- Krueger, J. & Rothbart, M. (1988). Use of categorical and individuating information in making inferences about personality. *Journal of Personality and Social Psychology, 55*, 187-195.

- Krulowitz, J.E. & Nash, J.E. (1980). Effects of sex role attitudes and similarity on men's rejection of male homosexuals. *Journal of Personality and Social Psychology*, 38, 67-74.
- Laner, M.R. & Laner, C.A. (1979). Personal style or sexual preference: Why gay men are disliked. *International Review of Modern Sociology*, 9, 215-228.
- Laner, M.R. & Laner, C.A. (1980). Sexual preference or personal style? Why lesbians are disliked. *Journal of Homosexuality*, 5(4), 339-356.
- Logue, P.M. (1997). Near \$1 million settlement raises standard for protection of gay youth. [On-line]. Available: <http://www.lambdalegal.org/cgi-bin/pages/documents>.
- MacDonald, A.P., Jr. (1976). Homophobia: Its roots and meanings. *Homosexuality Counseling Journal*, 3, 23-33.
- McCauley, C., Stitt, C.L., & Segal, M. (1980). Stereotyping: From prejudice to prediction. *Psychological Bulletin*, 87, 195-208.
- McFarland, S.G. & Adelson, S. (1996, July). *An omnibus study of individual difference and prejudice*. Paper presented at the meeting of the International Society for Political Psychology, Vancouver, British Columbia, Canada.
- McFarland, S.G. & Adelson, S. (1997, July). *Toward typology of prejudiced persons*. Paper presented at the meeting of the International Society for Political Psychology, Montreal, Quebec, Canada.
- McFarland, S.G., Ageyev, V.S., & Abalakina, M.A. (1992). Authoritarianism in the former Soviet Union. *Journal of Personality and Social Psychology*, 63, 1004-1010.

- McFarland, S.G., Ageyev, V.S., & Djintcharadze, N. (1996). Russian authoritarianism two years after communism. *Personality and Social Psychology Bulletin*, 22, 210-217.
- Miller, D.T. & Turnbull, W. (1986). Expectancies and interpersonal processes. In M.R. Rosenzweig & L.W. Porter (Eds.), *Annual review of psychology* (Vol. 37, pp. 233-256). Palo Alto, CA: Annual Reviews.
- Morrin, S.F. (1977). Heterosexual bias in psychological research. *American Psychologist*, 32, 629-637.
- Nabozny v. Podlesny*. (W.D. Wisconsin, 1995). (7th Cir., 1996). [On-line]. Available: <http://www.kentlaw.edu/7circuit/1996/jul/95-3634.html>.
- National Association of School Psychologists. (1992). *Principles for professional ethics*. Bethesda, MD: Author.
- Noonan, J.R., Barry, J.R., & Davis, H.C. (1970). Personality determinants in attitudes toward visible disability. *Journal of Personality*, 38, 1-15.
- O'Connor, A. (1994). Who gets called queer in school? Lesbian, gay and bisexual teenagers, homophobia and high school. *The High School Journal*, 77, 7-12.
- Oliver, M.B. & Hyde, J.S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, 114, 29-51.
- Page, S. & Yee, M. (1985). Conception of male and female homosexual stereotypes among university undergraduates. *Journal of Homosexuality*, 12, 109-117.
- Paludi, M.A. (1995). *The psychology of women* (2nd ed.). Dubuque, IA: Brown & Benchmark.

- Patterson, C.J. (Ed.). (1995). Sexual orientation and human development: An overview [Special issue]. *Developmental Psychology*, 31(1), 3-11.
- Peterson, B.E., Doty, R.M., & Winter, D.G. (1993). Authoritarianism and attitudes toward contermprorary social issues. *Personality and Social Psychology Bulletin*, 19, 174-184.
- Pilkington, N.W., & D'Augelli, A.R. (1995). Victimization of lesbian, gay, and bisexual youth in community settings. *Journal of Community Psychology* 23, 33-56.
- Pratto, F., Sidanius, J., Stallworth, L.M. & Malle, B.F. (1994). Social domiance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741-763.
- Remafedi, G. (1987). Adolescent homosexuality: Psychosocial and medical implications. *Pediatrics*, 79, 331-337.
- Rosenhan, D.L. (1973). On being sane in insane places. *Science*, 179, 250-258.
- Rotheram-Borus, M.J., Rosario, M., Van Rossem, R., Reid, H., & Gillis, R. (1995). Prevalence, course, and predictors of multiple problem behaviors among gay and bisexual male adolescents. *Developmental Psychology*, 31, 75-85.
- Rubble, D.N., & Martin, C.L. (1997). Gender development. In N. Eisenberg (Ed.), *Handbook of Child Psychology* (5th Ed., Vol. 3). New York: Wiley.
- Safe Schools Coalition of Wasington. (1998). *Iverson v. Kent School*. [On-line]. Available: <http://www.safeschools-wa.org/iversen.html>.
- Safren, S.A. & Heimberg, R.G. (1999). Depression, hopelessness, suicidality, and related factors in sexual minority and heterosexual adolescents. *Journal of Consulting and Clinical Psychology*, 67, 859-866.

- Salvia, J., Clark, G.M., & Ysseldyke, J.E. (1973). Teacher retention of stereotypes of exceptionality. *Exceptional Children*, 39, 651-652.
- Santrock, J.W. (1998). *Adolescence (7th Ed.)*. McGraw Hill: Boston, Massachusetts.
- Savin-William, R.C. (1990). *Gay and lesbian youth: Expressions of identity*. New York: Hemisphere.
- Savin-Williams, R.C. (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.C. (1995). An exploratory study of pubertal maturation timing and self-esteem among gay and bisexual male youths. *Developmental Psychology*, 31, 56-64.
- Savin-Williams, R.C., & Rodriguez, R.G. (1993). A developmental, clinical perspective on lesbian, gay male, and bisexual youths. In T.P. Gullotta, G.R. Adams, & R. Montemayor (Eds.), *Adolescent sexuality*. Newbury Park, CA: Sage.
- Schaecher, R. (1988, Winter). Stresses on lesbian and gay adolescents. *Independent Schools*, 29-35.
- Sidanius, J. (1993). The psychology of group conflict and the dynamics of oppression; A social dominance perspective. In S. Iyengar & W.J. McGuire (Eds.), *Explorations in political psychology* (pp. 183-219). Durham, NC: Duke University Press.

- Sidanius, J. & Pratto, F. (1993). The inevitability of oppression and the dynamics of social dominance. In P.M. Sniderman, P.E. Tetlock, & E.G. Carmines (Eds.), *Prejudice, politics, and the American dilemma* (pp. 171-211). Stanford, CA: Stanford University Press.
- Sidanius, J., Pratto, F., & Bobo, L. (1994). Social dominance orientation and the political psychology of gender: A case of invariance? *Journal of Personality and Social Psychology*, *67*, 998-1011.
- Sidanius, J., Pratto, F., & Bobo, L. (1996). Racism, conservatism, affirmative action, and intellectual sophistication: A matter of principled conservatism or group dominance? *Journal of Personality and Social Psychology*, *70*, 476-490.
- Sophie, J. (1986). A critical examination of stage theories of lesbian identity development. *Journal of Homosexuality*, *12*, 39-51.
- Spence, J.T., & Helmreich, R. (1978). *Masculinity and femininity: Their psychological dimensions*. Austin: University of Texas Press.
- Storms, M.D., Stivers, M.L., Lambers, S.M., & Hill, C.A. (1981). Sexual scripts for women. *Sex roles*, *7*, 699-707.
- Stinnett, T., Cruce, M., & Choate, K. (in press). Influences on teacher education student attitudes toward youth labeled HIV+. *Psychology in the Schools*.
- Strickland, B.R. (1995). Research on sexual orientation and human development: A commentary. *Developmental Psychology*, *31*, 137-140.
- Tharinger, D. & Wells, G. (2000). An attachment perspective on the developmental challenges of gay and lesbian adolescents: The need for continuity of caregiving from family to schools. *School Psychology Review*, *29*, 158-172.

- Ullman, J.B. Structural equation modeling. In B.G. Tabachnick & L.S. Fidell (Eds.), *Using Multivariate Statistics (3rd Edition)* (pp. 709-819). New York: HarperCollins College Publishers.
- Wells, G., Lasser, J., & Tharinger, D. (1997, August). *Sexual minority youth: Negotiating educational and developmental challenges*. Paper presented at the annual convention of the American Psychological Association, Chicago.
- Williams, J.E., & Best, D.L. (1989). *Sex and psyche: Self-concept viewed cross-culturally*. Newbury Park, CA: Sage.
- Williams, J.E., & Best, D.L. (1982). *Measuring sex stereotypes: A thirty-nation study*. Newbury Park, CA: Sage.
- Whitley, B.E. (1987). The relationship of sex-role orientation to heterosexuals' attitudes toward homosexuals. *Sex Roles, 17*, 103-113.
- Whitley, B.E. (1990). The relationship of heterosexuals' attributions for the causes of homosexuality to attitudes toward lesbians and gay men. *Personality and Social Psychology Bulletin, 16*, 369-377.
- Whitley, B.E. (1998, August). *Authoritarianism and social dominance orientation as independent dimensions of prejudice*. Paper presented at the 106th Annual Convention of the American Psychological Association, San Francisco.
- Whitley, B.E. (1999). Right-wing authoritarianism, social dominance orientation, and prejudice. *Journal of Personality and Social Psychology, 77*, 126-134.
- Whitley, B.E. & Kite, M.E. (1995). Sex differences in attitudes toward homosexuality: A comment on Oliver & Hyde (1993). *Psychological Bulletin, 117*, 146-154.

- Wischel, W. (1995, August). *Cognitive-affective theory of person-environment psychology*. Paper presented at the meeting of the American Psychological Association, New York.
- Woog, D. (1995). *Schools out: The impact of gay and lesbian issues on America's schools*. Boston: Alyson.
- Yoder, R.E., Preston, D.B., & Forti, E.M. (1997). Rural school nurses' attitudes about AIDS and homosexuality. *Journal of School Health, 67*, 341-347.
- Zanna, M.P. & Rempel, J.K. (1988). Attitudes: A new look at an old concept. In D. Bar-Tal & A.W. Kruglanski (Eds.), *The social psychology of knowledge* (pp. 315-334). Cambridge: Cambridge University Press.

APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL

**Oklahoma State University
Institutional Review Board**

Protocol Expires: 5/23/03

Date: Friday, May 24, 2002

IRB Application No: EDO2107

Proposal Title: THE UNDERLYING STRUCTURE OF ATTITUDES TOWARD GAY AND LESBIAN
YOUTH IN PRE-SERVICE TEACHERS

Principal
Investigator(s):

Terry Stinnett
445 Willard
Stillwater, OK 74078

Kurt Choate
434 Willard
Stillwater, OK 74078

Reviewed and
Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

Dear PI :

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,



Carol Olson, Chair
Institutional Review Board

APPENDIX B
STANDARDIZED ADMINISTRATION PROCEDURES

Standardized Administration Procedures

Gain students' attention.

Say...

"Hello, my name is _____ and I am a project assistant in a research project from Oklahoma State University as part of a doctoral dissertation that concerns the attitudes of future teachers. Several universities across the country, including yours, are utilizing future teachers as subjects in this study. Your participation in this research is purely voluntary and all information will be kept strictly confidential behind two locked doors at Oklahoma State University's School Psychological Services Clinic. Your name will not be associated with the questionnaires that you will answer. There are no anticipated risks to you in participating in this study and your participation will help improve diversity issues in higher education curriculum for future teachers in this country. If you do not wish to participate or have already participated in another class, please step outside at this time. If, at any time, you wish to withdraw from this study, please raise your hand and inform me (or a proctor). Are there any questions?"

Allow time for questions and let those students wishing to withdraw to leave the room.

Say...

"Thank you for your participation in our study. The proctors (or I) will now hand out the questionnaires. Please leave them face down as they are passed out.

Once the questionnaires have been handed out, say...

"Please turn over your questionnaire packet and tear off the top two pages. One of these forms is for you to keep. These are the consent forms for your participation in this study. I will read the consent form to you."

Read verbatim the informed consent sheet. When finished, say...

"Please sign both and place one in the box being held by me (or a proctor)."

Allow subjects to sign and return the consent forms to the proctors. When they are finished, say...

"Are there any questions?"

Allow time for questions, then say...

"This study should take between 20-30 minutes. Please answer honestly and truthfully to all the questions presented. When you are finished, raise your hand and place the packet face down in the box I have (the proctor has)."

APPENDIX C
PARTICIPANT CONSENT FORM

INFORMED CONSENT FORM

For participation in a research investigation conducted under the auspices of
Oklahoma State University

This study is entitled **The Underlying Structure of Attitudes toward Gay and Lesbian Youth in Pre-Service Teachers**. The principal investigator is Kurt T. Choate, as advised by Terry A. Stinnett, Ph.D.

I, _____, (print name) hereby authorize the administration of the following treatments and questionnaires:

- A Vignette/Evaluation of Teacher Attitudes towards Homosexuality**
- Participant Information Sheet**
- Right Wing Authoritarianism Scale**
- Social Dominance Orientation Scale**
- Bem Sex Role Inventory**

This study will gather information about teachers'-in-training attitudes concerning gay and lesbian youth. The questionnaires will be collected anonymously to ensure your privacy. None of the instruments have any identifying information. While adverse reactions are not anticipated, some participants may become uncomfortable while thinking about these topics of inquiry. Should this occur, and you feel you need counseling, please contact one of the proctors of the study or one of the investigators listed below for a referral. Potential benefits to society include a greater understanding of attitudes held by future teachers. This may result in more information for curriculum improvement at the higher education level and in the public schools.

I understand that participation is voluntary and that I will not be penalized if I choose not to participate. I also understand that I am free to withdraw my consent and end my participation in this project at any time without penalty. I further understand that I will be asked questions about my attitudes toward the sexual orientations of others. I understand that a copy of the results, when completed, will be submitted to Carol Olson, IRB chair, of this university and I may freely view the results by contacting Sharon Bacher, IRB Executive Secretary, Oklahoma State University, 203 Whitehurst, Stillwater, OK 74078. Phone: 405-744-5700.

For answers to pertinent questions about this study, I may contact Dr. Terry A. Stinnett, advisor, at (405) 744-9456 or Kurt T. Choate, graduate student, at (405) 744-6040. For information about information on subject's rights, I may contact Sharon Bacher, IRB Executive Secretary, Oklahoma State University, 203 Whitehurst, Stillwater, OK 74078. Phone: 405-744-5700.

I have read and fully understand the consent form. I sign it freely and voluntarily.

Signed: _____ Date: _____

Please keep one copy of this consent, sign the other, and turn it in when requested.

APPENDIX D

VIGNETTE

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

A 17-year-old (VARY GENDER: male/female) you come into contact with on a daily basis has very (VARY TRAITS: masculine/feminine) traits. This has caused tensions within the adolescent's family and with (VARY GENDER: his/her) peers. (VARY LABEL/NO LABEL: You have even overheard someone mention "homosexual" when referring to this student.)

APPENDIX E
EVALUATION OF TEACHERS' ATTITUDES
TOWARD HOMOSEXUALITY (ETAH) SCALE

Please circle the answer that best expresses your opinion based upon the vignette on the previous page. There are no right or wrong answers, so use your honest opinion about your attitudes toward each statement. Answer all questions by circling the letter(s) that correspond to the scale below. Be sure to answer each question.

	Strongly Agree	Agree	Disagree	Strongly Disagree
	SA	A	D	SD
1. I would show this student the same respect I show other students.	SA	A	D	SD
2. There is something wrong with this student.	SA	A	D	SD
3. I would feel okay teaching this student.	SA	A	D	SD
4. I would refer this student to the counselor.	SA	A	D	SD
5. I would correct and discipline teasing toward this student.	SA	A	D	SD
6. I monitor this student closely when around younger children.	SA	A	D	SD
7. This student deserves what s/he gets.	SA	A	D	SD
8. I modify my curriculum for diversity, including sexual orientation.	SA	A	D	SD
9. It is okay for this student to show affection toward same-sex peers.	SA	A	D	SD
10. This student is disgusting and despicable.	SA	A	D	SD
11. I respect this student's diversity.	SA	A	D	SD
12. This student has chosen this way of life.	SA	A	D	SD

13. This student scares me.	SA	A	D	SD
14. This student deserves special rights, such as those given to racial, ethnic, or class minorities.	SA	A	D	SD
15. I would eat lunch with this student.	SA	A	D	SD
16. I am sick to my stomach when around this student.	SA	A	D	SD
17. This student should be allowed to attend the same classes as other children.	SA	A	D	SD
18. I would discourage this student from choosing the military as a career.	SA	A	D	SD
19. I feel at ease talking with this student.	SA	A	D	SD
20. I would tell other teachers of my suspicions about this student.	SA	A	D	SD
21. This student should be referred for psychological testing.	SA	A	D	SD
22. I feel uncomfortable when alone with this student.	SA	A	D	SD
23. This student should be isolated from other children.	SA	A	D	SD
24. I would be comfortable with this student in my class.	SA	A	D	SD

25. I would encourage other children to be friends with this student.	SA	A	D	SD
26. I treat this student as I would treat any other child at my school.	SA	A	D	SD

APPENDIX F
DEMOGRAPHIC INFORMATION SHEET

Participant Information

AGE: _____

GENDER: M F

ETHNICITY: _____ 01 Caucasian/European-American
(check one) _____ 02 African-American
 _____ 03 Latino/a; Hispanic; Puerto Rican
 _____ 04 Asian-American
 _____ 05 American Indian/Native American
 _____ 06 Other: _____

RELATIONSHIP STATUS: _____ 01 Single/Never Married
(check one) _____ 02 Married
 _____ 03 Divorced
 _____ 04 Widowed
 _____ 05 Committed Relationship/
 Significant Other

CERTIFICATION LEVEL SOUGHT: _____ 01 Early Elementary
(check one) _____ 02 Elementary Ed.
 _____ 03 Secondary Ed.
 _____ 04 K-12
 _____ 05 Other: _____

TYPE OF TEACHER: _____ 01 Regular Education
 (math, science, elementary, social
 studies, history, English, etc.)
 _____ 02 Special Education (LD, MR, ED, BD, etc.)
 _____ 03 Physical Education (coach, p.e., etc.)
 _____ 04 Vocational Education (Agricultural
 Ed., Technical Training, etc.)
 _____ 05 Administration (principal, superintendent,
 etc.)
 _____ 06 Support Personnel (counselor, psychologist,
 speech pathology, etc.)

CLASSIFICATION: _____ 01 Freshman _____ 02 Sophomore
 _____ 03 Junior _____ 04 Senior
 _____ 05 Special Student _____ 06 Graduate
 Student

I am friends or family with someone who “came out” to me, indicating their sexual orientation as being “homosexual” or “bisexual”.

1 Yes

2 No

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

1 Yes

2 No

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

1 Yes

2 No

State (if U.S.) or Country of High School Graduation

APPENDIX G

RIGHT-WING AUTHORITARIANISM (RWA) SCALE

REPRINTED WITH PERMISSION FROM THE AUTHOR

Circle the number:

- 4 if you *very strongly disagree* with a statement
- 3 if you *strongly disagree* with a statement
- 2 if you *moderately disagree* with a statement
- 1 if you *slightly disagree* with a statement
- 0 if you feel exactly and precisely *neutral* about a statement
- + 1 if you *slightly agree* with a statement
- + 2 if you *moderately agree* with a statement
- + 3 if you *strongly agree* with a statement
- + 4 if you *very strongly agree* with a statement

You may find that you sometimes have different reactions to different parts of a statement. For example, you might very strongly disagree (“- 4”) with one idea in a statement, but slightly agree (“+ 1”) with another idea in the same item. When this happens, please combine your reactions, and write down how you feel “on balance” (i.e., a “- 3” in this example).

Very Strongly Disagree	Neutral					Very Strongly Agree		
1. Life imprisonment is justified for certain crimes.								
-4	-3	-2	-1	0	+1	+2	+3	+4
2. Women should have to promise to obey their husbands when they get married.								
-4	-3	-2	-1	0	+1	+2	+3	+4
3. The established authorities in our country are usually smarter, better informed, and more competent than others are, and the people can rely upon them.								
-4	-3	-2	-1	0	+1	+2	+3	+4
4. It is important to protect the rights of radicals and deviants in all ways.								
-4	-3	-2	-1	0	+1	+2	+3	+4
5. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.								
-4	-3	-2	-1	0	+1	+2	+3	+4
6. Gays and lesbians are just as healthy and moral as anybody else.								
-4	-3	-2	-1	0	+1	+2	+3	+4

	Very Strongly Disagree			Neutral				Very Strongly Agree	
7. Our country would be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the “rotten apples” who are ruining everything.	-4	-3	-2	-1	0	+1	+2	+3	+4
8. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.	-4	-3	-2	-1	0	+1	+2	+3	+4
9. The <i>real</i> keys to the “good life” are obedience, discipline, and sticking to the straight and narrow.	-4	-3	-2	-1	0	+1	+2	+3	+4
10. A lot of our rules regarding modesty and sexual behavior are just customs which are not necessarily any better or holier than those which other people follow.	-4	-3	-2	-1	0	+1	+2	+3	+4
11. There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.	-4	-3	-2	-1	0	+1	+2	+3	+4
12. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people’s minds.	-4	-3	-2	-1	0	+1	+2	+3	+4
13. There is absolutely nothing wrong with nudist camps.	-4	-3	-2	-1	0	+1	+2	+3	+4
14. There is no “ONE right way” to live life; everybody has to create their <i>own</i> way.	-4	-3	-2	-1	0	+1	+2	+3	+4
15. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.	-4	-3	-2	-1	0	+1	+2	+3	+4
16. Homosexuals and feminists should be praised for being brave enough to defy “traditional family values.”	-4	-3	-2	-1	0	+1	+2	+3	+4
17. The situation in our country is getting serious, the strongest methods would be justified if they eliminated the troublemakers and got us back to our true path.	-4	-3	-2	-1	0	+1	+2	+3	+4

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

18. It may be considered old fashioned by some, but having a normal, proper appearance is still the mark of a gentleman and, especially, a lady.	-4	-3	-2	-1	0	+1	+2	+3	+4
19. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.	-4	-3	-2	-1	0	+1	+2	+3	+4
20. A “woman’s place” should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.	-4	-3	-2	-1	0	+1	+2	+3	+4
21. What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.	-4	-3	-2	-1	0	+1	+2	+3	+4
22. People should pay less attention to the Bible and the other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral.	-4	-3	-2	-1	0	+1	+2	+3	+4
23. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.	-4	-3	-2	-1	0	+1	+2	+3	+4
24. Our country <i>needs</i> free thinkers who will have the courage to defy traditional ways, even if this upsets many people.	-4	-3	-2	-1	0	+1	+2	+3	+4
25. There is nothing wrong with premarital sexual intercourse.	-4	-3	-2	-1	0	+1	+2	+3	+4
26. It would be best for everyone if the proper authorities censored magazines so that people could not get their hands on trashy and disgusting material.	-4	-3	-2	-1	0	+1	+2	+3	+4
27. It is wonderful that young people today have greater freedom to protest against things they don’t like, and to make their own “rules” to govern their behavior.	-4	-3	-2	-1	0	+1	+2	+3	+4
28. What our country <i>really</i> needs, instead of more “civil rights,” is a good stiff dose of law and order.	-4	-3	-2	-1	0	+1	+2	+3	+4

	Very Strongly Disagree				Neutral				Very Strongly Agree
29. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way” things are supposed to be done.	-4	-3	-2	-1	0	+1	+2	+3	+4
30. Obedience and respect for authority are the most important virtues children should learn.	-4	-3	-2	-1	0	+1	+2	+3	+4
31. Nobody should “stick to the straight and narrow.” Instead, people should break loose and try out lots of different ideas and experiences.	-4	-3	-2	-1	0	+1	+2	+3	+4
32. Once our government leaders give us the “go ahead,” it will be the duty of every patriotic citizen to help stomp out the rot that is poisoning our country from within.	-4	-3	-2	-1	0	+1	+2	+3	+4
33. We should treat protesters and radicals with open arms and open minds, since new ideas are the lifeblood of progressive change.	-4	-3	-2	-1	0	+1	+2	+3	+4
34. The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.	-4	-3	-2	-1	0	+1	+2	+3	+4

APPENDIX H

SOCIAL DOMINANCE ORIENTATION (SDO) SCALE

REPRINTED WITH PERMISSION BY THE FIRST AUTHOR

Use the following scale to indicate your level of agreement or disagreement with each of the following items. Make sure to circle only ONE (1) number for each item.

disagree					neither agree					agree
strongly					nor disagree					strongly
0	1	2	3	4	5	6	7	8	9	10

Group equality should not be our ideal.

0 1 2 3 4 5 6 7 8 9 10

To get ahead in life, it is sometimes necessary to step on other groups.

0 1 2 3 4 5 6 7 8 9 10

No group of people is more worthy than any other.

0 1 2 3 4 5 6 7 8 9 10

It would be good if all groups were equal.

0 1 2 3 4 5 6 7 8 9 10

In getting what your own group wants, it should never be necessary to use force against other groups.

0 1 2 3 4 5 6 7 8 9 10

Increased social inequality would be a bad thing.

0 1 2 3 4 5 6 7 8 9 10

All groups should be given an equal chance in life.

0 1 2 3 4 5 6 7 8 9 10

If certain groups of people stayed in their place, we would have fewer problems.

0 1 2 3 4 5 6 7 8 9 10

disagree strongly						neither agree nor disagree						agree strongly
0	1	2	3	4	5	6	7	8	9	10		

We should do what we can to equalize conditions for different groups.

0 1 2 3 4 5 6 7 8 9 10

Superior groups should not seek to dominate inferior groups.

0 1 2 3 4 5 6 7 8 9 10

Inferior groups should stay in their place.

0 1 2 3 4 5 6 7 8 9 10

Treating different groups more equally would create more problems than it would solve.

0 1 2 3 4 5 6 7 8 9 10

There is no point in trying to make incomes more equal.

0 1 2 3 4 5 6 7 8 9 10

It's a real problem that certain groups are at the top and other groups are at the bottom.

0 1 2 3 4 5 6 7 8 9 10

No one group should dominate in society.

0 1 2 3 4 5 6 7 8 9 10

Sometimes other groups must be kept in their place.

0 1 2 3 4 5 6 7 8 9 10

APPENDIX I

RWA ITEM'S MEANS AND STANDARD DEVIATIONS

Item	Mean	Std. Deviation
Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us	-1.12	2.37
Gays and lesbians are just as healthy and moral as anybody else.	-0.97	2.79
Our country would be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the "rotten apples" who are ruining everything.	-1.28	2.17
Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.	-0.13	2.56
The real keys to the "good life" are obedience, discipline, and sticking to the straight and narrow.	-0.26	2.27
A lot of our rules regarding modesty and sexual behavior are just customs which are not necessarily any better or holier than those which other people follow.	-0.59	2.37
There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.	-0.71	2.10
It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people's minds.	-0.88	2.11
There is absolutely nothing wrong with nudist camps.	-0.27	2.47
There is no "ONE right way" to live life; everybody has to create their own way.	-1.60	2.79

Item	Mean	Std. Deviation
Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.	-0.71	2.37
Homosexuals and feminists should be praised for being brave enough to defy "traditional family values."	0.45	2.50
The situation in our country is getting serious, the strongest methods would be justified if they eliminated the troublemakers and got us back to our true path.	-1.25	2.04
It may be considered old fashioned by some, but having a normal, proper appearance is still the mark of a gentleman and, especially, a lady.	0.88	2.27
Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.	-1.95	2.28
A "woman's place" should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly to the past.	-2.21	2.29
What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.	-0.47	2.30
People should pay less attention to the Bible and the other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral.	1.47	2.46

Item	Mean	Std. Deviation
The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.	-0.73	2.28
Our country needs free thinkers who will have the courage to defy traditional ways, even if this upsets many people.	-0.85	2.26
There is nothing wrong with premarital sexual intercourse.	-0.25	2.78
It would be best for everyone if the proper authorities censored magazines so that people could not get their hands on trashy and disgusting material.	-0.86	2.51
It is wonderful that young people today have greater freedom to protest against things they don't like, and to make their own "rules" to govern their behavior.	-0.71	2.17
What our country really needs, instead of more "civil rights," is a good stiff dose of law and order.	-0.63	2.18
Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the "normal way" things are supposed to be done.	0.08	2.48
Obedience and respect for authority are the most important virtues children should learn.	0.61	2.21
Nobody should "stick to the straight and narrow." Instead, people should break loose and try out lots of different ideas and experiences.	-0.38	2.19

Item	Mean	Std. Deviation
Once our government leaders give us the "go ahead," it will be the duty of every patriotic citizen to help stomp out the rot that is poisoning our country from within.	-1.42	1.97
We should treat protesters and radicals with open arms and open minds, since new ideas are the lifeblood of progressive change.	-0.39	1.96
The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.	-0.13	2.08

APPENDIX J

SDO ITEM'S MEANS AND STANDARD DEVIATIONS

Item	Mean	Std. Deviation
Group equality should not be our ideal.	3.35	2.94
To get ahead in life, it is sometimes necessary to step on other groups.	3.06	2.82
No group of people is more worthy than any other.	8.29	2.41
It would be good if all groups were equal.	8.21	2.45
In getting what your own group wants, it should never be necessary to use force against other groups.	7.61	2.75
Increased social inequality would be a bad thing.	7.41	3.05
All groups should be given an equal chance in life.	9.18	1.42
If certain groups of people stayed in their place, we would have fewer problems.	3.02	2.71
We should do what we can to equalize conditions for different groups.	7.61	2.19
Treating different groups more equally would create more problems than it would solve.	3.34	2.85
There is no point in trying to make incomes more equal.	3.37	2.88
It's a real problem that certain groups are at the top and other groups are at the bottom.	6.54	2.73
No one group should dominate in society.	7.73	2.49
Sometimes other groups must be kept in their place.	3.06	2.84

Item	Mean	Std. Deviation
Superior groups should not seek to dominate inferior groups.	7.90	2.24
Inferior groups should stay in their place.	2.31	2.42

APPENDIX K

BEM SEX-ROLE INVENTORY ITEM'S MEANS AND STANDARD DEVIATIONS

Item	Mean	Std. Deviation
self-reliant	5.73	0.90
defends own beliefs	6.01	0.94
independent	5.85	1.03
athletic	4.77	1.58
assertive	4.79	1.26
strong personality	5.36	1.34
forceful	3.34	1.43
analytical	4.62	1.48
has leadership abilities	5.54	1.17
sensitive to other's needs	6.07	1.02
understanding	6.14	0.82
compassionate	6.15	0.92
dominant	3.62	1.45
masculine	2.65	1.71
willing to take a stand	5.21	1.25
aggressive	3.62	1.59
acts as a leader	5.16	1.31
individualistic	5.34	1.23
competitive	4.98	1.63
ambitious	5.59	1.17
yielding	3.77	1.17
cheerful	5.64	0.98
shy	3.61	1.57
affectionate	5.68	1.18
flatterable	4.78	1.37
loyal	6.31	0.83
feminine	5.16	1.81
sympathetic	5.77	1.05
truthful	6.07	0.76
sincere	6.14	0.80
conceited	2.44	1.12
self-sufficient	5.35	1.20
soft-spoken	3.71	1.66
warm	5.55	1.04
tender	5.45	1.20
gullible	3.82	1.61
childlike	3.76	1.59
unsystematic	3.11	1.47
loves children	6.46	0.87
gentle	5.82	1.11

APPENDIX L

ETAH ITEM'S MEANS AND STANDARD DEVIATIONS

Item	Mean	Std. Deviation
I would show this student the same respect I show other students	3.76	0.43
There is something wrong with this student	3.23	0.75
I would feel okay teaching this student	3.65	0.50
I would refer this student to the counselor	2.55	0.78
I would correct and discipline teasing toward this student	3.50	0.71
I monitor this student closely when around younger children	3.00	0.78
This student deserves what s/he gets	3.52	0.63
I modify my curriculum for diversity, including sexual orientation	2.52	0.81
It is okay for this student to show affection toward same-sex peers	2.49	0.81
This student is disgusting and despicable	3.61	0.52
I respect this student's diversity	3.30	0.68
This student has chosen this way of life	2.27	0.81
This student scares me	3.47	0.60
This student deserves special rights, such as those given to racial, ethnic, or class minorities	2.07	0.84
I would eat lunch with this student	3.31	0.65
I am sick to my stomach when around this student	3.58	0.51

Item	Mean	Std. Deviation
This student should be allowed to attend the same classes as other children	3.70	0.48
I would discourage this student from choosing the military as a career	3.11	0.74
I feel at ease talking with this student	3.29	0.66
I would tell other teachers of my suspicions about this student	3.05	0.73
This student should be referred for psychological testing	3.26	0.64
I feel uncomfortable when alone with this student	3.29	0.75
This student should be isolated from other children	3.63	0.49
I would be comfortable with this student in my class	3.45	0.54
I would encourage other children to be friends with this student	3.35	0.56
I treat this student as I would treat any other child at my schools	3.66	0.50

APPENDIX M

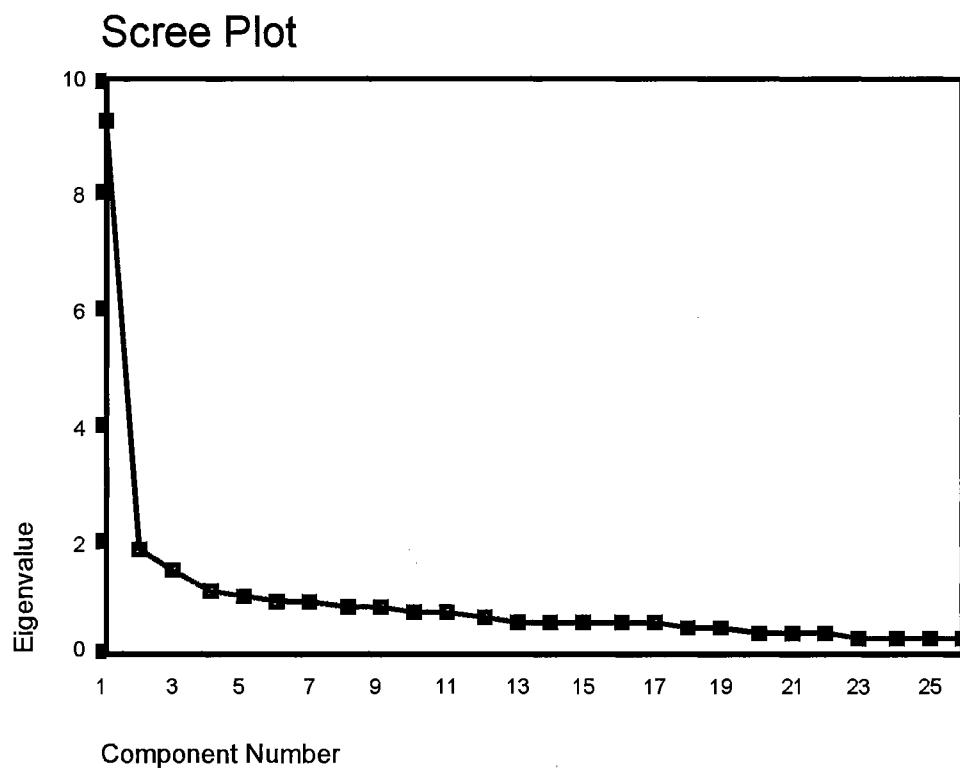
ETAH FACTOR LOADINGS AND SCREE PLOT OF THE FINAL EXTRACTION

Rotated Factor Solution

Item	<u>FACTOR</u>		
	1	2	3
This student scares me	.767		
I treat this student as I would treat any other child at my schools	.740		
I am sick to my stomach when around this student	.735		
I would show this student the same respect I show other students	.726		
I would be comfortable with this student in my class	.721		
This student should be isolated from other children	.718		
This student should be allowed to attend the same classes as other children	.713		
This student is disgusting and despicable	.710		
I feel at ease talking with this student	.687		
I would feel okay teaching this student	.678		
I would eat lunch with this student	.624		
I would encourage other children to be friends with this student	.609		
I feel uncomfortable when alone with this student	.594		
This student deserves what s/he gets	.532		
I respect this student's diversity	.519		

Item	FACTOR		
	1	2	3
I would discourage this student from choosing the military as a career	.454	.356	
I would correct and discipline teasing toward this student	.426	-.359	
This student should be referred for psychological testing		.719	
I would refer this student to the counselor		.650	
I monitor this student closely when around younger children		.595	
There is something wrong with this student		.485	
I would tell other teachers of my suspicions about this student		.471	
I modify my curriculum for diversity, including sexual orientation			.727
This student deserves special rights, such as those given to racial, ethnic, or class minorities			.634
It is okay for this student to show affection toward same-sex peers		.452	.489
This student has chosen this way of life			.446

Note. Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 5 iterations.
Only loadings > 0.35 are displayed.



APPENDIX N
COVARIANCE MATRIX OF INITIAL SEM

Table N1

Covariance Matrix for Initial SEM

	Know Homo?	Bem	Gender	ETAH	RWA	SDO
Know Homo?	0.245					
Bem	0.017	1.133				
Gender	-0.025	0.182	0.153			
ETAH	-1.594	-0.527	0.446	83.157		
RWA	6.088	4.382	1.189	-285.791	2242.45	
SDO	1.942	-3.737	-2.516	-102.939	453.28	552.977

2.

VITA

Kurt Thomas Choate

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE UNDERLYING STRUCTURE OF ATTITUDES TOWARDS GAY AND LESBIAN YOUTH IN PRE-SERVICE TEACHERS

Major Field: Educational Psychology (Option: School Psychology)

Biographical:

Personal Data: Born in Tulsa, Oklahoma, on October 16, 1969, the son of Doyle and Jo Ann Choate.

Education: Graduated from Charles Page High School, Sand Springs, Oklahoma, in May 1987; received Bachelor of Science degree in Education and Mathematics from the University of Tulsa, Tulsa, Oklahoma in May 1991; received Master of Education degree in School Counseling from Northeastern State University, Tahlequah, Oklahoma in December 1993. Completed the requirements for the Doctor of Philosophy degree with a major in Educational Psychology (School Psychology option) at Oklahoma State University in August 2003.

Experience: employed as a mathematics classroom teacher for Tulsa Public Schools; employed as a rehabilitation counselor for Brookhaven Hospital, Tulsa, Oklahoma; employed as a psychological assistant for Northern Oklahoma Resource Center, Enid, Oklahoma; employed by Oklahoma State University, School of Applied Health and Educational Psychology as a graduate research and teaching assistant and associate, 1998 – 2002; internship at Lewisville Independent School District, 2002 – 2003.

Professional Memberships: National Association of School Psychologists, American Psychological Association, Oklahoma School Psychological Association, Texas Association of School Psychologists