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Changing college students' attitudes toward sexual diversity

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The University of Arizona, 1994

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CHANGING COLLEGE STUDENTS'
ATTITUDES TOWARD SEXUAL DIVERSITY

by
Richard Kelly Morris

A Thesis Submitted to the Faculty of the
SCHOOL OF FAMILY AND CONSUMER RESOURCES
In Partial Fulfillment of the Requirements
For the Degree of

MASTER OF ARTS
WITH A MAJOR IN COUNSELING AND GUIDANCE

In the Graduate College
THE UNIVERSITY OF ARIZONA

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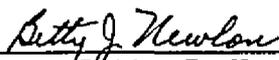
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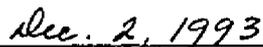


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ACKNOWLEDGMENTS

For all those who have influenced me throughout my life journey and who have participated in some way with this project--thank you. This thesis is yet another stepping stone in my own evolution. Special thanks to my husband, Glenn Matchett, who has put up with my sleepless nights and cranky days culminating in this project.

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ABSTRACT

This is a pre-test, post-test with a comparison and treatment group study surrounding sexual diversity in residence halls at The University of Arizona. The study starts at the beginning of an academic year with an anonymous Diversity Questionnaire for all residents in two similar residence halls. Both halls are coeducational and similar in student population, age, size and location.

Each hall's residents were asked to complete the questionnaire to be scored. One hall's (Graham/Greenlee) Resident Assistants were told of the results and asked to prioritize their programming to include sexual diversity issues. The other hall's (Apache/Santa Cruz) questionnaires were scored, but no results will be disclosed and, therefore, no special programming took place. At the end of the academic year, the questionnaire was repeated in both halls and compared to the beginning of the year questionnaire results to show changes in attitudes towards sexual diversity.

CHAPTER 1
INTRODUCTION

College and university student service staffs are increasingly recognizing that old models of bureaucratic structure and "in loco parentis" policies are not capable of coping with the rapidly changing nature of the students enrolled (Delworth & Hanson, 1978). Many theorists (Chickering, 1969; Hunt, 1970; Kohlberg, 1975) have proposed models of college student development that focus on systematic change over time while in college. These researchers view college settings as developmental communities in which students encounter both challenges and supports (Sanford, 1966).

Arthur Chickering's (1969) seven vectors of development in young adulthood outline different sources of influence on students in the college environment. The seven vectors are developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing purpose, and developing integrity. With these vectors in mind and in an attempt to create an atmosphere of challenge and support in an educational setting, Chickering addressed several college student issues. The issues are development of commuter students, problems of academic advising, the nature of educational innovation, and residential students.

Empirical studies have shown that, not only are residential students more happy than commuter students with their undergraduate experience and more likely to complete their education, but they show greater changes in personality, attitudes and values (Chickering, 1974a). These findings support the belief that college residence halls provide a significant context for student development. Further, it can be seen that as students interact, they have the opportunity to observe

the impact of their own behavior on others and begin to develop a personal system of values. As residential students interact with others whose values are different, they also challenge their old values and stereotypes.

Some residence halls offer programs and activities that promote student development. By utilizing a residence hall as a "laboratory" for student development, the programs and activities provide focused challenges to address self-exploration of personal attitudes and values. Some of the areas in which attitudes and values have been effectively challenged are religious beliefs, political position (liberal versus conservative), ethnic identity, gender issues and, more recently, sexual orientation (Astin, 1983). Sexual orientation has become more of a focus as homosexual civil rights groups on college campuses press for inclusion in institution anti-discrimination statements.

Homosexuality, which was once not talked about or presented in public arenas, is now becoming accepted as another minority group. While homosexuals have been with us since ancient times, homosexuality is still shrouded by fear and superstition. Further, American society has a deep sense of negativity toward sexuality as a whole which brings with it other problems beyond the scope of this thesis. Perhaps for historic reasons, homosexuality has remained unrecognized by the dominant society as a viable lifestyle and continues to be controversial (Stevenson, 1988).

As laws regarding civil rights change and homosexuals become more visible to mainstream society (e.g., the United States military), new ways must be found to educate people about this diverse lifestyle. It is important that homosexuality be recognized as an optional identity because of the power sexual orientation has in determining social role and vulnerability to stigmatization. Violence against homosexuals has increased because of the recent media coverage (Berrill, 1990). Self-doubt, distress and other dysfunctions often result for homosexuals

whose sense of personal reality is contradicted by the powerful cultural message to choose heterosexuality and deny homosexuality.

Research in the area of changing attitudes of college students toward sexual diversity is lacking. Most of the research on this topic has taken place in the past 5 to 10 years. The research that has been done shows a wide variety of results (Young, Gallagher, Belasco, Barr, & Webber, 1991; D'Augelli & Rose, 1990).

Purpose of the Study

This study addressed attitudes toward sexual diversity of university students living in residence halls in an attempt to identify and evaluate a means of challenging student attitudes toward sexual diversity. The purpose of the study was to assess whether residence hall programming would be associated with attitudinal changes toward sexual diversity.

Statement of the Problem

The purpose of this study prompted this hypothesis: Exposure to planned residence hall programming will positively effect attitudes toward sexual diversity. To test this hypothesis the following questions were asked:

1. What are the attitudes of students toward others whose sexual orientation is different from their own?
2. To what extent are the attitudes about sexual diversity of students related to their perceived parental attitudes?
3. To what extent is residence hall programming associated with positive change in attitudes toward sexual diversity?

Definition of Terms

Listed below are terms which need clarification for the purposes of this study. These definitions have been created by using a compilation of professional journals and reflect knowledge gained through experiences from sexual orientation seminars by the researcher.

College. Also university. An institution of higher education that follows secondary or high school.

Coming out. The process of a gay man, lesbian, or bisexual becoming aware of his/her sexual orientation and of letting other people know. Gay men, lesbians, and bisexuals are often "out" to some people and not "out" to others.

Gender. Cultural and societal expectations of a person's characteristics and behavior based on their biological sex.

Heterosexism. The institutionalized set of beliefs and attitudes that suggest or state that heterosexuals are normal and natural and that homosexuals are, by contrast, deviant and unnatural. Often implied is the idea that heterosexuals are superior to homosexuals and, therefore, have the right to discriminate against them. Heterosexism assumes that everyone is heterosexual and that only heterosexuality is right, good, or legitimate.

Heterosexuality. Also straight. People who form their primary loving and sexual relationships with people of the other sex.

Homophobia. Unreasonable fear of homosexuals or homosexuality.

Homosexuality. Also homosexual, gay men and lesbian. People who form their primary loving and sexual relationships with people of the same sex.

Sex. The biological controlled determination whether a person is male or female.

Sexual diversity. The full range of sexual orientation. This includes orientations that are exclusively homosexual, heterosexual and the continuum between of bisexuality.

Sexual orientation. The primary sexual feelings a person has including a range of sexual feelings on a continuum that includes bisexuality, heterosexuality and homosexuality.

Assumptions

The positions, suggestions, and implications of this work are based on the following premises:

1. Human sexuality and sexual expression are complex functions with a wide range of behaviors.
2. Heterosexuality is a positive form of sexual expression.
3. Homosexuality and bisexuality are positive forms of sexual expression.
4. Homosexuality, per se, is not a mental illness or other form of psychological deficiency.
5. Homosexuality represents a minority sexual orientation in that while universal, it is less common than heterosexuality in practice, for cultural and/or biological reasons not fully understood at this time.
6. Homosexuality differs from heterosexuality primarily in terms of the sex of the love/sex object.
7. Homosexuals and bisexuals have two types of problems: generic human problems in individual development and daily living and problems resulting from membership in a stigmatized minority group.
8. Biases against homosexuality as a viable, valuable form of sexual expression continue to exist in educational settings.
9. Heterosexism and homophobia damage/prohibit the developmental community settings at colleges.

10. There is a need within educational settings to develop educational and training interventions which promote and encourage higher levels of acceptance of sexual diversity.
11. Cultural attitudes of sexual diversity are the same regardless of sexual orientation.

Summary

This chapter presented an historical perspective on previous research conducted on university students' attitudes regarding sexual diversity. There was also a discussion of the purpose of this study, the statement of the problem, the researcher's assumptions, and definitions that will help the reader to understand the discussions which follow.

CHAPTER 2

LITERATURE REVIEW

This chapter reviews the literature related to traditional university age students, university residence halls, university students' attitudes and sexual diversity issues as they might relate to university students. The research to follow is far from exhaustive but will give the reader a deeper understanding of the issues related to the purpose of this study which was to address sexual attitudes of university students living in residence halls in an attempt to identify a means to challenge students attitudes and assess attitudinal changes toward sexual diversity.

Colleges and universities have been experiencing a boom of growth since the early 1960s. These conditions have created a new developmental period for young adults from age 17 or 18 into the middle or late 20s. This period presents an opportunity in which certain changes may be fostered and during which certain kinds of adjustment and development may predominate (Knefelkamp, Widick, & Parker, 1978). The following review outlines a theoretical framework, university students' attitudes, sexual diversity, and finally, a summary.

Theoretical Framework

Because of the growing university populations and the complexity of their needs, it is necessary to select an available theory and/or framework to assist in giving constancy to the changing conditions to which higher education is subjected. Most researchers in this field acknowledge the earlier writings of Katz and Sanford (1962), Jean Piaget (1964), and Erik Erikson (1963) that set forth theories on human personality development. The developmental designs created by these researchers are inadequate for the purposes of this study as they do not

provide for an in depth assessment/evaluation of this particular period and population.

In selecting a theory or framework the question, "what is the relation between theories/frameworks and real life?" was asked. In answering this question, Arthur Chickering's seven vectors of development was chosen as a framework on which to base the research (Chickering, 1969). Chickering is a scholar-practitioner that used his research to bridge the gap between theoretical knowledge and the realities of practice. Chickering describes a model of university student development, and outlines sources of impact on student development in the university environment. Chickering uses the word vector to describe his developmental areas because each vector has a direction and size, though the direction may be expressed more appropriately by a spiral or by steps than by a straight line with a beginning and an end. Following are the seven vectors as set forth by Chickering (1969):

1. Achieving Competence: A three part vector: (1) intellectual competence, (2) physical and manual skills, and (3) social and interpersonal competence. A key concept is to be able to gain a sense of competence and confidence that you have the ability to cope with what comes, and to achieve successfully what you set out to do (p. 8).
2. Managing Emotions: In this vector one must learn not only the management of emotions but time, place and behavior, of what emotions can be shared with whom, when and under what circumstances. It is not healthy to repress emotions (p. 10).
3. Becoming Autonomous: This vector has three major facets: (1) establishing emotional autonomy, (2) attaining instrumental autonomy, and (3) recognition

of one's interdependence. Emotional autonomy involves a gradual decrease in the need for continual reassurances or approval. Instrumental autonomy involves the ability to make plans to meet self-made goals and to act on those plans. Recognition of interdependence involves the realization of connectedness to others and being able to find the middle ground between militant independence and absolute conformity (p. 11).

4. **Establishing Identity:** This vector involves the clarification or matching of individuals as they appear to others and as they see themselves. You must clarify your sense of identity with your physical and sexual self (p. 13).
5. **Freeing Interpersonal Relationships:** This vector involves developing a greater tolerance and acceptance for a wider range of differences among others. Tolerance does not simply refer to "putting up with" but also refers to an increased capacity to respond to those different from yourself. This is what allows relationships to develop on a deeper level of trust, independence, and individuality (p. 15).
6. **Clarifying Purposes:** Also developing purpose. This vector also has three parts: (1) recreational interests, (2) vocational interests, and (3) lifestyle preference. By resolving mismatched purposes or integrating these purposes a coherent (not necessarily specific) direction is set for one's life (p. 16).
7. **Developing Integrity:** This vector involves the defining of one's values. The steps taken in this area are humanizing of values, personalizing of

values, and seeking to make congruent one's beliefs and behaviors (p. 17).

Chickering's framework is especially important to this research as he envisions universities as developmental communities in which one can provide challenges and needed supports to encourage development within the seven vectors (Widick et al., 1978).

As the vectors described above are inter-related, it is difficult to say which particular vector is being specifically challenged by this research as all vectors will be effected if the study is successful. Vectors 3, 5, and 7 (developing autonomy, freeing interpersonal relationships and developing integrity) are the ones most likely to be targeted as they involve values or attitudes.

University Students' Attitudes

Many studies have been completed on university students' attitudes--if they change and how they change (Chickering, 1974b; Finney, 1974; Franks, Falk, & Hinton, 1973). These studies have been on a wide range of topics from political liberalism to self-esteem. The general design of these studies required that differences in students when they first enter college be determined statistically by giving a pre-test. A post-test was given to measure any changes or impact the college experience had on the subjects. Analyses indicated that many of these affective changes may be attributed in part to the college experience and not simply to maturational factors. Students who go away from home to attend college show a larger increase in liberalism, interpersonal self-esteem, artistic interests and larger declines in traditional religious preferences (Astin, 1983).

Other studies have been done on students' values and attitudes and the impact that an individual's major field of study may have on those values and attitudes (Feldman & Newcomb, 1969; Southworth & Morningstar, 1970). These studies have confirmed that intellectual self-esteem is

enhanced by majoring in mathematics or natural sciences. They further show that majoring in the social sciences seems to magnify increases in interpersonal self-esteem, artistic interests, and liberalism. Majoring in engineering appears to have the opposite effects.

To return to Chickering's (1976) research, he indicates six components of a college environment that can be utilized to influence a student's development. They are as follows: (1) Clarity and consistency of objectives; (2) Size of institution; (3) Curriculum, Teaching and Evaluation; (4) Residence hall arrangements; (5) Faculty and administration; and (6) Friends, groups, and student culture. For the purpose of this study, the fourth component, residence halls, were used. A residence hall is a controlled environment that can more easily be manipulated to challenge individual development.

Sexual Diversity

There is no such thing as homosexuality. The homosexual experience is so diverse, the variety of its psychological, social and sexual correlates so enormous, its originating factors so numerous, that to use the word "homosexuality" or "homosexual" as if it meant more than simply the nature of a person's object choice is misleading and imprecise. . . . There are as many different kinds of homosexuals as heterosexuals, and thus it is impossible to predict the nature of any [person's] personality, social adjustment, or sexual functioning on the basis of his or her sexual orientation. (Bell, 1979, p. 99)

This research does not attempt to define the appropriateness of sexual diversity. It is assumed that normal human sexuality encompasses the full range of sexual experience. That is, heterosexuality, homosexuality and bisexuality are a part of the normal range of human sexuality (Kinsey, 1948, 1953). Bell's (1979) statement helps to

explain why defining the boundaries of sexuality is difficult--if not impossible. Therefore, this research is concerned with the full range of possible attitudes and values toward individuals that have experiences and/or desires different from one's own.

In the recent years, the gay liberation movement has had a dramatic influence on public awareness of the differences in sexual orientation and what these differences mean. This awareness has lead individuals with an orientation other than heterosexuality, as well as heterosexuals, to leave the old negative societal values behind and welcome a new openness and acceptance of self (Lips, 1988). Although this awareness exists, heterosexism and homophobia continue to have a large impact on our society (Chesler & Zuniga, 1991). Despite this new openness many people continue to hold mistaken beliefs about sexual orientation: what it means, how many people fall into the various categories, and how the different orientations happen. It is these mistaken beliefs that are addressed in the following research.

Realizing that there continues to be a negative bias against individuals who are not heterosexual (Astin, 1985) is but the first stage in considering which direction to go to encourage further acceptance of sexual diversity. It is most difficult to find a means to encourage this acceptance, and even more elusive controlling factors outside of a treatment plan and measuring changes. Many researchers have approached these problems haphazardly. One study (Gilliam & Seltzer, 1989) attempted to make positive changes in college student's attitudes toward homosexuality by showing a film on AIDS. A pre-test was given to participants prior to viewing the film and a post-test was given after the film. The results showed an increase in homophobia for the participants. Other research showed the greatest amount of positive change in attitudes toward homosexuality by combining an educational media (films) and exposure to individuals that are different (Larson,

1981). This approach, especially in regard to a residence hall setting, seems the most appropriate and most likely to achieve a desired change.

Summary

This chapter presented theories and frameworks of developmental periods pertaining to traditional age college students, attitudes of university students and how they can be changed, and a review of the literature. Chapter 3 addresses the method and procedures used in this study.

CHAPTER 3

METHODS

The methods and procedures for examining the research questions of this study will be discussed in this chapter. Also included are subjects, instrumentation, procedures, research design, data analysis, and summary. The purpose of this study was to look at a university student population living in residence halls to see if attitudes toward sexual diversity would change following programming.

Subjects

The participants in this study were recruited from two residence halls at the University of Arizona during the 1992-1993 academic year. Participants had to be at least 18 years of age. Participation was voluntary, and all information obtained was kept confidential. One residence hall was used as a comparison group and the other as a treatment group. Approval for this study was granted by The University of Arizona Human Subjects Committee (see Appendix A).

Instrument

The instrument used for this study (see Appendix B) was a questionnaire developed specially for this study to ascertain the attitudes toward diversity issues. Experts in the field of diversity education were consulted in the development of the questionnaire, including appropriate questions and wording to be utilized. The demographic section was followed by six Likert-type five-response items, six forced-response items, and three open-ended items. The questions addressed attitudes toward diversity issues. For the purposes of this study, only five of the total items were analyzed: two Likert-type items and three forced choice items. The demographic information was

included in order to ascertain the population in question. All items used for this study were intended to give an indication of an individual's comfort level regarding sexual diversity. The entire questionnaire took approximately 10 minutes to complete.

Procedures

Permission for this study was obtained from the University of Arizona, Director of Residence Life. The study used a pre-test (at the beginning of the academic year) and a post-test (at the end of the academic year) in two residence halls. Hall A was used as a comparison group (no treatment) and Hall B was used as a treatment group (treatment). The treatment that was used is described later.

Individuals in the study qualified for participation by living in one of the two selected residence halls and being at least 18 years of age. The halls were selected for their similarities; both were coeducational, had approximately 350 residents, 16 Resident Assistants, and both halls had an openly gay Hall Director. Residents were recruited during required wing meetings at the beginning (pre-test) and ending (post-test) of the academic year. At the end of the initial wing meeting, Resident Assistants were asked to read a statement about the study (see Appendix C). The questionnaires were passed out to each resident. Residents were asked to complete the questionnaire at the end of the wing meeting or to complete it later. All the completed questionnaires were returned to the Resident Assistant. There was no identifying information on the questionnaires to ensure confidentiality. The researcher then collected the completed questionnaires from each Resident Assistant. Only the primary researcher reviewed the questionnaires which were to be kept confidential and placed under lock and key until after the research was completed and accepted.

After the initial data collection for the pre-test, the questionnaires for the treatment group (Hall B) were analyzed to confirm

that residents had some level of discomfort regarding sexual orientation issues. Hall B Resident Assistants were then told that educational programs or seminars were to be presented in the hall on a monthly basis. The programs were approximately one and a half hour in length and involved gay, lesbian and bisexual participants from outside the hall. The following is a list of the program titles that were offered:

1. Building Healthy Relationships. Panel discussion consisting of one heterosexual couple, one lesbian couple and one gay male couple.
2. Taking the Challenge. Straight talk from gays. Panel discussion consisting of three gay men, two lesbians, and one bisexual female.
3. Long-Time Companion. Movie and discussion led by a gay male.
4. A Little Respect. Rutgers University film on homosexuals on campus followed by a discussion led by a gay male.
5. Be True to Yourself. Film produced by Rod and Bob Paris-Jackson, a married gay couple, discussion led by one gay male and one lesbian.
6. Torch Song Trilogy. Movie and discussion led by one gay male.
7. Sexuality 101. Seminar-type discussion about human sexual behavior with one gay male presenter.
8. Parents FLAG Presents A panel discussion by Parents and Friends of Lesbians and Gays (Parents-FLAG) consisting of four parents of gay and lesbian children.

The comparison group (Hall A) was not given any information regarding results from the questionnaire. Further, Hall A Resident Assistants were not mandated to present the hall with any additional

programs regarding sexual orientation. The Resident Assistants did, however, present one program during the academic year on building healthy relationships that included a gay male couple for a panel discussion.

The post-test questionnaires were completed in both halls in the same manner as the pre-test. That is, the Resident Assistants were given the questionnaires, asked to read the same explanatory statement about the research, hand out and collect the completed questionnaires, and the researcher collected the completed questionnaires from the Resident Assistants.

Data Analysis

This research utilized a quasi-experimental design. The researcher was interested in testing the cause and effect relationship of a specified treatment but was unable to control for all possible variables. All the data were entered into SPSS (Statistical Program for the Social Sciences) for statistical analysis. A T-test was used within groups and across groups to assess whether the two groups were equivalent for the pre-test and to show any changes that occurred for the post-test as a result of the treatment.

Summary

This chapter has covered the methods and procedures used in this study. Subjects, instrumentation, and method of data analysis were also presented. The next chapter will present the results of the study.

CHAPTER 4

RESULTS

Introduction

The purpose of this study was to address university students' attitudes toward others whose sexual orientation was different from their own. An attempt was made through residence hall programming to challenge students' attitudes toward sexual diversity and to assess attitudinal changes. In this chapter, participant demographics, analysis of the data, and a summary of the results are presented.

Demographics

It was not possible to identify detailed respondent demographics. However, it was possible to identify general residence hall demographics. Both halls were 50% male and 50% female. Mean student age was 19 with a range of 17 to 26. Those individuals under 18 years of age were asked not to participate as obtaining parental consent would be difficult. All participants were single and predominantly (more than 50%) from out of state. A large proportion (more than 60%) of the participants were also in their first year of university study (Freshman).

Data Analysis

To test for group equivalency a t-test was performed on the pre-test response to Questions 4 and 6 between the comparison and treatment groups. Questions 4 and 6 were Likert-type questions with five available responses: very comfortable, comfortable, uncertain, uncomfortable, and very uncomfortable. For data entry purposes, a number was assigned to each response. The numbers were 1, 2, 3, 4, and 5 respectively. Overall, because of the large sample size there is high statistical conclusion validity.

Question 4 asked, "what would your comfort level be if your roommate is of a different sexual orientation." This question was asked in order to assess participants' attitudes toward sexual diversity in a living/roommate situation. The results of the pre-test demonstrate that both the comparison group and treatment group had a high level of discomfort with a mean response of 3.47 and 3.67 respectively (see Table 1). The post-test results show a more liberal/accepting attitude for the treatment group (mean of 2.64) and a less liberal/accepting attitude for the comparison group (mean of 4.23). The group equivalence for the pre-test supports the inference that the more liberal/accepting attitude of the treatment group is due to the treatment.

Question 6 asked students to "rate the following situations from the most comfortable situation (1) to the least comfortable situation (5)." This question was asked to see if the rating of sexual diversity would change over the course of the academic year with respect to other living/roommate situations. The results of the pre-test are similar to the results of Question 4. The comparison and treatment groups had high levels of discomfort with mean scores of 4.03 and 3.94 respectively (see Table 2). The post-test results, also similar to the results of Question 4, illustrate that the comparison group became less comfortable (mean of 4.18) and the treatment group somewhat more comfortable (mean of 3.26). As the groups appear to be equivalent for the pre-test, the changes in attitude reflected in the post-test within the treatment group can be attributed to the treatment.

In Questions 7, 8, and 11, students were asked to choose three words which best describe "your attitudes toward people with a sexual orientation other than your own," "your perception of your parents' attitudes toward people with a sexual orientation other than their own," and "your attitudes toward people with a sexual orientation similar to your own," respectively.

Table 1

T-Test for Group Equivalence and Rating for Comfort Level of Roommate Situation (Question 4)

Group	Pre-test			Post-test		
	N	M	SD	N	M	SD
Comparison	201	3.47	1.33	103	4.23	.94
Treatment	191	3.67	1.35	42	2.64	1.20

Note: Pre-test df = 390, t = - 1.49, p = .136
 Post-test df = 143, t = - 8.48, p = .0001

Table 2

T-Test for Group Equivalence and Rating for Comfort Level of Roommate Situation (Question 6)

Group	Pre-test			Post-test		
	N	M	SD	N	M	SD
Comparison	196	4.03	1.29	102	4.18	1.31
Treatment	189	3.94	1.42	42	3.26	1.45

Note: Pre-test df = 383, t = .57, p = .537
 Post-test df = 142, t = - 3.69, p = .0001

The 25 words were later rated by a convenient sample to establish which word was most liberal/accepting (1) to the least liberal/accepting (25) (see Table 3). The words are listed from the most liberal/accepting (1) to the least liberal/accepting (25).

Table 3

Forced Choice Word Rating

1. Embracing	10. Tolerant	18. Tense
2. Open	11. Sympathetic	19. Afraid
3. Acceptant	12. Compassionate	20. Guarded
4. Understanding	13. Undecided	21. Critical
5. Empathetic	14. Ambivalent	22. Closed
6. Comfortable	15. Indifferent	23. Judgmental
7. Caring	16. Embarrassed	24. Prejudiced
8. Appreciative	17. Discomfort	25. Hostile
9. Interested		

For these questions (7, 8, and 11), a frequency distribution showing percentages for the three responses was calculated to enable comparison of the pre-test and post-test responses within and across groups. Question 7 asked participants to "Choose three words which best describe your attitudes toward people with a sexual orientation other than your own." This question was asked to discern attitudes toward sexual diversity not specifically related to a living/roommate situation. A frequency distribution was calculated showing the frequency percentage of responses for each word choice (A = first choice, B = second choice, C = third choice) for the pre-test and post-test of both the comparison and treatment groups (see Table 4). The words are listed in the order of most liberal at the top to the least liberal at the bottom. A second frequency distribution was then calculated combining the three choices to show the percentage, rank, and number of times each word was used (see Table 5).

This frequency distribution of the pre-test displays the similarities for the comparison and treatment groups, adding to the conclusion validity. The post-test results show an increase in

Table 4

Frequency Distribution by Percent for Question 7: Three Words that Describe Your Attitudes Toward People with a Sexual Orientation Other Than Your Own

<u>TEST GROUP RESPONSE</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>
<u>WORD</u>												
Embracing		1.1		1.1		1.1		1.0				
Open	6.8	5.3	4.9	10.8	4.9	6.8	2.0	6.0	1.0	17.9	13.5	2.8
Acceptant	4.7	9.0	11.4	8.6	8.2	15.3	2.0	5.0	14.4	2.6	16.2	2.8
Understanding	5.8	4.7	4.9	3.8	3.8	3.4	3.0	4.0	3.1	2.6	5.4	13.9
Empathetic	1.6		.5		1.6	.6			2.1			5.6
Comfortable	5.8	4.8	3.2	4.3	4.4	.6	3.0	1.0	1.0	15.4	5.4	16.7
Caring			1.6	.5	1.6	1.7		1.0		2.6	2.7	2.8
Appreciative				.5	1.1	.6					2.7	2.8
Interested	.5	2.7	2.2	1.6	3.8	1.1	4.0	1.0	1.0	5.1	5.4	11.1
Tolerant	13.1	8.0	5.9	10.8	7.7	7.3	19.0	11.0	2.1	10.3	13.5	2.8
Sympathetic		.5	1.6	1.6		1.7			2.1	2.6	2.7	
Compassionate			1.6		1.1			1.0			2.7	
Undecided	4.2	4.8	4.9	1.6	4.4	5.1		4.0	7.2	2.6	8.1	2.8
Ambivalent	1.0	1.1	.5	1.1	1.6	1.1	7.0			2.6		2.8
Indifferent	6.8	5.9	7.0	3.2	5.5	7.3	2.0	7.0	6.2	10.3	8.1	
Embarrassed	1.0	1.1	1.6	1.6	3.8	2.8	1.0		1.0			2.8
Discomfort	18.3	9.6	8.1	20.5	8.7	6.8	27.0	7.0	8.2	20.5		

Table 4, continued

<u>TEST</u> <u>GROUP</u> <u>RESPONSE</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>
<u>WORD</u>												
Tense	7.9	10.6	8.6	6.5	8.7	9.6	6.0	16.0	7.2	2.6	2.7	2.8
Afraid	3.1	2.7	5.4	2.2	3.3	3.4	1.0	9.0	5.2			11.1
Guarded	7.9	9.0	11.9	5.4	6.6	9.0	6.0	11.0	11.3	2.6	5.4	5.6
Critical	2.6	2.7	1.6	1.6	1.1	3.4	1.0	2.0	10.3		5.4	
Closed	2.6	3.7	7.0	5.4	4.9	4.0	5.0	2.0	5.2			2.8
Judgmental	2.1	3.2	1.1	2.7	1.1	3.4	5.0	4.0	2.1			2.8
Prejudiced	2.1	3.2	2.2	2.2	7.7	1.7	6.0	5.0	4.1			5.6
Hostile	2.1	3.7	2.2	2.2	4.4	2.3	6.0	2.0	5.2			

Table 5

Frequency Distribution by Percent, Rank, and Number for Question 7: Three Words that Describe Your Attitudes Toward People with a Sexual Orientation Other Than Your Own

<u>TEST GROUP</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	N = 196			N = 191			N = 102			N = 42		
	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>
<u>WORD</u>												
Embracing	.3	24	2	.8	22	4	.3	22	1		24	
Open	5.7	7	33	7.5	5	43	3.0	15	9	14	2	11.4
Acceptant	8.2	5	48	10.7	2	61	7.1	5	22	9	5	7.2
Understanding	5.2	8	30	3.6	11	21	3.3	14	10	9	4	7.3
Empathetic	.7	20	4	.8	23	5	.7	19	2	2	16	1.8
Comfortable	4.7	9	28	3.1	12	18	1.6	18	5	16	1	12.5
Caring	.5	22	3	1.2	20	7	.3	23	1	4	12	2.7
Appreciative		25		.7	24	4		25		2	14	1.9
Interested	1.9	17	11	2.1	17	12	1.9	17	6	9	6	7.2
Tolerant	9.1	3	54	8.6	3	49	10.6	2	32	11	3	8.9
Sympathetic	.7	21	4	1.6	19	9	.7	20	2	2	19	1.7
Compassionate	.5	23	3	.4	25	2	.3	24	1	1	20	.9
Undecided	4.7	10	28	3.7	10	21	3.7	12	11	6	9	4.5
Ambivalent	.9	19	5	1.2	21	7	2.3	16	7	2	17	1.8
Indifferent	6.6	6	39	5.3	7	30	4.9	6	15	8	8	6.1
Embarrassed	1.3	18	8	2.7	15	15	.6	21	2	1	21	.9
Discomfort	12.1	1	71	12.0	1	69	13.9	1	42	9	7	6.8
Tense	9.1	4	54	8.2	4	47	9.6	3	29	4	13	2.7

Table 5, continued

<u>TEST</u> <u>GROUP</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	N = 196			N = 191			N = 102			N = 42		
	<u>z</u>	<u>RANK</u>	<u>#</u>	<u>z</u>	<u>RANK</u>	<u>#</u>	<u>z</u>	<u>RANK</u>	<u>#</u>	<u>z</u>	<u>RANK</u>	<u>#</u>
<u>WORD</u>												
Afraid	3.8	12	22	2.9	13	17	4.9	7	15	5	11	3.7
Guarded	9.7	2	57	7.1	6	41	9.3	4	28	6	10	4.5
Critical	2.4	15	14	2.0	18	11	4.3	9	13	2	18	1.8
Closed	4.5	11	26	4.7	8	27	3.9	11	12	1	22	.9
Judgmental	2.2	16	13	2.4	16	14	3.6	13	11	1	23	.9
Prejudiced	2.5	14	15	3.8	9	22	4.9	8	15	2	15	1.9
Hostile	2.7	13	16	2.9	14	17	4.3	10	13		25	

hostility toward sexual diversity for the comparison group and an overall increase in a more liberal attitude for the treatment group. Because of the group equivalence for the pre-test, it can be inferred that the differences in attitudes was related to the treatment for the treatment group (more liberal/accepting attitude).

Using the information from the frequency distributions, a T-test was calculated on the five words that showed the most significant changes in usage over time (pre-test compared to post-test). The results (see Table 6) further display the increase liberal attitudes for the treatment group and the decrease in liberal attitudes for the control group. The most significant difference can be seen in the treatment groups complete lack of usage for the words hostile and prejudiced---the least liberal words.

Question 8 asked participants to "Choose three words that best describe your perception of your parents' attitudes toward people with a sexual orientation other than their own." This question was asked in order to assess any affinity of the students' attitudes to the parents' attitudes regarding sexual diversity not specifically related to a living/roommate situation. A frequency distribution was

Table 6

T-Test for the Five Words Related to Attitudes of Participants Toward Those With Different Sexual Orientations Showing the Most Significant Change of Usage Over Time

Word	Group					
	Control		Treatment		t-value	p
	n	freq.	n	freq.		
Comfortable	104	5	42	14	4.96	.001
Tense	104	31	42	2	- 3.41	.001
Open	104	11	42	13	- 3.05	.003
Hostile	104	13	42	0	-	-
Prejudiced	104	7	42	0	-	-

calculated showing the frequency percentage of responses for each word choice (A = first choice, B = second choice, C = third choice) for the pre-test and post-test of both the comparison and treatment groups (see Table 7). Again, the pre-test results show high equivalency for the comparison and treatment groups. A further calculation of the combined usage for words was completed to show the percentage, rank, and number of times each word was used (see Table 8). They are also similar to the student response to Question 7 (Tables 4 and 5) although, overall, perception of parental attitudes are somewhat less liberal for both groups. By examining the post-test results we see a very similar trend. That is, students' perception of parental attitudes toward sexual diversity and the students attitudes became less liberal/accepting for the comparison group and somewhat more liberal/accepting for the treatment group (Tables 4 and 5).

Using the information from the frequency distributions, a T-test was calculated on the five words that showed the most significant changes in usage over time (pre-test compared to post-test). The results (see Table 9) further display the increase liberal attitudes for the perception of the parental attitudes of the treatment group and the decrease in liberal attitudes for perception of the parental attitudes for the control group. The most significant difference can be seen in the treatment groups complete lack of usage for the words prejudiced and afraid.

Question 11 asked participants to "Choose three words that best describe your attitudes toward people with a sexual orientation similar to your own." This question was asked to assess students' attitudes toward sexuality not specifically related to sexual diversity. A frequency distribution was calculated showing the frequency percentage of responses for each word choice (A = first choice, B = second choice, C = third choice) for the pre-test and post-test of both the comparison and treatment groups (see Table 10). These calculations were then

Table 7

Frequency Distribution by Percent for Question 8: Three Words that Describe Your Perception of Your Parents' Attitudes Toward People with a Sexual Orientation Other Than Their Own

<u>TEST</u> <u>GROUP</u> <u>RESPONSE</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>
<u>WORD</u>												
Embracing		.6					1.1			2.1		
Open	4.4	5.6	2.8	8.7	5.4	3.1	3.4	1.2	6.3	2.7	6.1	3.1
Acceptant	3.3	5.0	6.8	6.4	7.2	8.0	3.4	5.8	5.0	5.4	12.1	18.8
Understanding	3.9	2.8	3.4	8.7	3.6	3.7	6.8	3.5	3.8	8.1	6.1	12.5
Empathetic	.6		.6	1.2	.6	.6	1.1	1.2	1.3	6.1		
Comfortable	1.1	2.8	1.1	2.9	1.2	3.7		3.5	1.3	5.4	3.0	9.4
Caring		1.1	2.8	1.2	.6	3.1		2.3	2.5		3.0	
Appreciative	.6	.6	.6		.6							
Interested	.6	.6	2.8	1.2	3.6	1.2	3.4		1.3			3.1
Tolerant	13.8	6.1	5.1	10.4	8.4	9.9	13.6	9.3	2.5	21.6	9.1	
Sympathetic	.6	1.7	2.8	.6	2.4	.6		1.2	2.5	8.1		
Compassionate		.6	.6	1.2	.6	1.2		2.3				3.1
Undecided	2.2	3.9	4.0	4.6	4.2	5.6	8.0	4.7	8.8	2.7	3.0	9.4
Ambivalent	.6	3.4	.6	1.2	.6	1.2	1.1	4.7	1.3	5.4		
Indifferent	3.3	5.6	7.3	2.9	7.2	9.3	4.5	8.1	6.3		6.1	9.4
Embarrassed	1.1	1.1	3.4	.6	1.8	1.9			2.5	2.7		3.1
Discomfort	12.7	3.9	6.2	9.2	7.8	6.8	21.6	4.7	7.5	10.8	9.1	3.1

Table 7, continued

<u>TEST GROUP RESPONSE</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>
<u>WORD</u>												
Tense	8.3	7.8	9.6	.6	5.4	9.3	3.4	9.3	5.0	5.4	6.1	3.1
Afraid	.6	2.8	4.5	1.7	3.0	2.5	1.1	8.1	3.8			
Guarded	6.1	9.5	6.8	1.7	7.8	6.2	2.3	2.3	8.8	2.7	3.0	6.3
Critical	9.9	8.4	2.8	8.7	4.8	4.9	10.2	3.5	8.6	2.7	18.2	3.1
Closed	7.7	6.1	7.9	9.2	5.4	3.7	8.0	7.0	6.3	5.4	3.0	6.3
Judgmental	7.7	7.3	9.0	7.5	7.2	7.4	3.4	7.0	5.0	2.7	12.1	3.1
Prejudiced	7.2	8.9	4.0	6.9	6.0	2.5	4.5	5.8	6.3			
Hostile	3.9	3.9	4.5	2.9	4.2	3.7	2.3	4.7	3.8			3.1

Table 8

Frequency Distribution by Percent, Rank, and Number for Question 8: Three Words That Describe Your Perception of Your Parents' Attitudes Toward People With a Sexual Orientation Other Than Their Own

<u>TEST GROUP</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	N = 196			N = 191			N = 102			N = 42		
<u>WORD</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>
Embracing	.2	25	1		25		.3	24	1	.7	18	1
Open	4.2	11	25	5.7	8	33	3.6	14	11	4.0	12	5
Acceptant	5.0	10	29	7.2	4	41	4.7	10	14	12.1	1	15
Understanding	3.3	13	19	5.3	9	30	4.7	11	14	9.0	3	11
Empathetic	.4	23	2	.8	23	5	1.2	20	4	2.0	15	3
Comfortable	1.6	18	9	2.6	15	15	1.6	17	5	5.9	6	8
Caring	1.3	20	8	1.6	18	9	1.6	18	5	1.0	19	1
Appreciative	.6	22	3	.2	24	1		25			23	
Interested	1.3	21	8	2.0	17	11	1.5	19	5	1.0	20	1
Tolerant	8.3	2	49	9.5	1	54	8.4	2	26	10.2	2	13
Sympathetic	1.7	17	10	1.2	20	7	1.2	21	4	2.7	14	4
Compassionate	.4	24	2	1.0	21	6	.7	22	2	1.0	21	1
Undecided	3.3	14	19	4.8	13	27	7.1	4	22	5.0	9	6
Ambivalent	1.5	19	9	1.0	22	6	2.3	16	7	1.8	16	2
Indifferent	5.4	9	32	6.4	5	37	6.3	6	19	5.2	8	7
Embarrassed	1.8	16	11	1.4	19	8	.8	23	2	1.9	17	2
Discomfort	7.6	4	45	7.9	2	45	11.2	1	34	7.6	4	10

Table 8, continued

<u>TEST GROUP</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	N = 196			N = 191			N = 102			N = 42		
<u>WORD</u>	<u>‡</u>	<u>RANK</u>	<u>#</u>	<u>‡</u>	<u>RANK</u>	<u>#</u>	<u>‡</u>	<u>RANK</u>	<u>#</u>	<u>‡</u>	<u>RANK</u>	<u>#</u>
Tense	8.5	1	50	5.1	12	29	5.9	7	18	4.9	10	6
Afraid	2.6	15	15	2.4	16	14	4.3	12	13		24	
Guarded	7.5	5	44	5.2	10	30	4.3	13	13	4.0	13	5
Critical	7.1	7	42	6.2	6	36	7.4	3	23	8.0	5	10
Closed	7.3	6	43	6.2	7	36	7.0	5	21	5.0	11	6
Judgmental	8.1	3	48	7.4	3	42	5.0	9	15	6.0	7	8
Prejudiced	6.8	8	40	5.2	11	30	5.4	8	17		25	
Hostile	4.2	12	25	3.7	14	21	3.5	15	11	1.0	22	1

TABLE 9

T-Test for the Five Words Related to Participants' Perception of Parents' Attitudes Toward Those With Different Sexual Orientations Showing the Most Significant Change of Usage Over Time

WORD	GROUP				t-value	p
	Control		Treatment			
	n	freq.	n	freq.		
Comfortable	104	4	42	6	2.29	.024
Tense	104	12	42	11	2.22	.028
Open	104	12	42	9	1.54	.125
Prejudiced	104	14	42	0	-	-
Afraid	104	10	42	0	-	-

Table 10

Frequency Distribution by Percent for Question 11: Three Words That Describe Your Attitudes Toward People With a Sexual Orientation Similar to Your Own

<u>TEST GROUP RESPONSE</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>
<u>WORD</u>												
Embracing	1.1	2.2	2.3		.6	6.7	5.2	4.2	4.5	2.6	8.6	3.0
Open	30.6	18.5	9.8	29.3	25.4	9.2	19.8	18.8	14.8	23.7	20.0	15.2
Acceptant	6.1	14.0	20.7	6.9	11.2	21.5	8.3	17.7	11.4	5.3	14.3	21.2
Understanding	4.4	10.7	10.9	4.6	5.3	4.9	5.2	8.3	8.0	5.3	8.6	3.0
Empathetic	.6					.6	2.1		1.1			
Comfortable	32.8	19.1	12.1	37.9	20.1	9.8	34.4	22.9	14.8	23.7	8.6	15.2
Caring	2.2	6.7	6.3	1.7	5.3	11.7	6.3	5.2	11.4		8.6	3.0
Appreciative	3.3	4.5	7.5	4.0	7.1	7.4	3.1	6.3	8.0	7.9		6.1
Interested	2.2	6.2	3.4	2.9	7.1	5.5	1.0	1.0	1.1	5.3	2.9	3.0
Tolerant	4.4	2.8	4.6	1.7	2.4	4.3	4.2	1.0	4.5	7.9	2.9	3.0
Sympathetic		.6	.6		1.2	1.2	1.0		1.1		2.9	
Compassionate	1.1	1.1	2.9	1.7	3.6	3.1	1.0	4.2	5.7			3.0
Undecided	1.7	2.2	4.0		.6	.6	1.0	1.0	1.1		2.9	3.0
Ambivalent	.6	1.1	1.7		2.4	.6		1.0	1.1		5.7	
Indifferent	6.7	8.4	10.9	8.0	5.3	10.5	6.3	7.3	10.2	13.2	11.4	12.1
Embarrassed			.6							2.6		
Discomfort				.6		.6						
Tense						.6		1.0		2.6	2.9	

Table 10, continued

<u>TEST</u> <u>GROUP</u> <u>RESPONSE</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>
<u>WORD</u>												
Afraid	.6								1.1			
Guarded	.6											3.0
Critical	.6	.6	1.1		.6							6.1
Closed		.6		.6	1.2	.6						
Judgmental			.6									
Prejudiced	.6											.6
Hostile		.6			.6		1.0					

combined to show the percentage, rank and number of times each word was used (see Table 11). The pre-test results show high correlation between the comparison and treatment groups. Pre-test results indicate some conservative feelings toward sexuality for both groups. The post-test results indicate only slight differences from the pre-test and even less difference across groups. It can be inferred from these results that sexuality, in general, is not an easy issue for college students. Further, the treatment used for this study (sexual diversity programs) had little or no effect on attitudes toward sexuality in general.

Using the information from the frequency distributions, a T-test was calculated on the five words that showed the most significant changes in usage over time (pre-test compared to post-test). The results (see Table 12) further display the discomfort regarding sexuality for college students.

Summary

The data analysis did answer the research questions. Students' attitudes toward others whose sexual orientation is different from their own is somewhat negative. These attitudes appear to be related to the perceived parental attitudes toward others whose sexual orientation is different from their own. Residence hall programming did effect a positive, that is more liberal, change in attitude by offering programs in which discussions can occur with individuals that have diverse sexual orientations.

This chapter has presented demographic information, data analysis from the questionnaires, and a summary of the data analysis. The research appears to be highly significant ($p = .0001$) and shows statistical conclusion validity. Chapter 5 presents a review of the findings, conclusions of the results, limitations of the study, and recommendations for further research.

Table 11

Frequency Distribution by Percent, Rank, and Number for Question 11: Three Words That Describe Your Attitudes Toward People With a Sexual Orientation Similar to Your Own

<u>TEST GROUP</u>	<u>PRE-TEST</u>						<u>POST-TEST</u>					
	<u>Comparison</u>			<u>Treatment</u>			<u>Comparison</u>			<u>Treatment</u>		
	N = 196			N = 191			N = 102			N = 42		
<u>WORD</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>
Embracing	1.8	11	11	2.3	11	13	4.6	8	14	4.7	6	6
Open	19.6	2	115	21.2	2	121	17.8	2	55	19.6	1	25
Acceptant	13.6	3	80	13.1	3	75	12.5	3	38	13.6	3	17
Understanding	8.6	5	51	4.9	8	28	7.2	6	22	5.6	5	7
Empathetic	.2	16	1	.2	18	1	1.1	11	3		19	
Comfortable	21.3	1	125	22.6	1	130	24.0	1	74	15.8	2	20
Caring	5.1	6	30	6.2	5	36	7.6	5	23	3.9	9	5
Appreciative	5.1	7	30	6.2	6	36	5.9	7	18	4.7	7	6
Interested	3.9	8	23	5.2	7	30	1.0	12	3	3.7	10	5
Tolerant	3.9	9	23	2.8	9	16	3.2	10	10	4.6	8	6
Sympathetic	.4	15	2	.8	13	5	.7	14	2	1.0	15	1
Compassionate	1.8	12	11	2.8	10	16	3.6	9	11	1.0	16	1
Undecided	2.7	10	16	.4	15	2	1.1	13	3	2.0	11	3
Ambivalent	1.1	13	7	1.0	12	6	.7	15	2	1.9	13	2
Indifferent	8.7	4	51	7.9	4	45	8.0	4	25	12.2	4	15
Embarrassed	.2	17	1		23			19		.9	17	1
Discomfort		24		.4	16	2		20			20	

Table 11, continued

<u>TEST</u> <u>GROUP</u>	<u>PRE-TEST</u>					<u>POST-TEST</u>						
	<u>Comparison</u>			<u>Treatment</u>		<u>Comparison</u>			<u>Treatment</u>			
	N = 196			N = 191		N = 102			N = 42			
	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>	<u>%</u>	<u>RANK</u>	<u>#</u>
<u>WORD</u>												
Tense		25		.2	19	1	.3	16	1	1.8	14	2
Afraid	.2	18	1	.4	17	2	.4	17	1		21	
Guarded	.2	19	1		24			21		1.0	18	1
Critical	.8	14	5	.2	20	1		22		2.0	12	3
Closed	.2	20	1	.8	14	5		23			22	
Judgmental	.2	21	1		25			24			23	
Prejudiced	.2	22	1	.2	21	1		25			24	
Hostile	.2	23	1	.2	22	1	.3	18	1		25	

Table 12

T-Test for the Five Words Related to Attitudes of Participants Toward Those With a Similar Sexual Orientation Showing the Most Significant Change of Usage Over Time

Word	Group				t-value	p
	Control		Treatment			
	n	freq.	n	freq.		
Comfortable	104	67	42	17	- 2.70	.008
Interested	104	3	42	4	1.70	.090
Caring	104	21	42	4	- 1.55	.123
Compassionate	104	10	42	1	- 1.50	.136
Tense	104	1	42	2	1.47	.145

CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This study has addressed attitudes toward sexual diversity of university students living in residence halls in an attempt to identify a means to challenge, and make positive changes (that is, more liberal/accepting) in students' attitudes toward sexual diversity. This chapter presents a review of the findings, conclusions of the results, limitations of the study, and recommendations for further study.

Review of the Findings

By using Arthur Chickering's (1969) early model of seven vectors of development in young adulthood and his later (1974a) research specific to residential students, a plan was developed to the hypothesis: Exposure to residence hall programming will effect attitudes toward sexual diversity. To substantiate this hypothesis the following questions were asked:

1. What are the attitudes of students toward others whose sexual orientation is different from their own?
2. To what extent are the attitudes about sexual diversity of students related to the perceived parental attitudes?
3. To what extent is residence hall programming related to changes in attitudes toward sexual diversity?

In answering these questions this research viewed universities, and specifically residence halls, as a developmental community in which one can provide challenges and needed supports to encourage development in Chickering's seven vectors (Widick et al., 1978).

Studies have been done regarding student's general values and attitudes, and the impact their major field of study may have on those values (Feldman & Newcomb, 1969; Southworth & Morningstar, 1970). Another study has looked at the effects of going away from home to attend college and its impact on attitudes on such areas as liberalism, interpersonal self-esteem, artistic interests, and traditional religious preferences (Astin, 1983). Homosexuality and bisexuality continue to be largely unrecognized as a viable lifestyle and controversial (Stevenson, 1988). Further, heterosexism and homophobia continue to be prevalent in our society (Chesler & Zuniga, 1991). Homosexuals/bisexuals are becoming more visible to mainstream society due to challenges to civil rights laws (e.g., the United States military). The research that has been done in this area shows a wide variety of results (D'Augelli & Rose, 1990; Young et al., 1991). Because of these factors, sexual diversity has been the focus of this research in an attempt to find new and effective ways to educate people about sexual diversity.

Residence halls were used for this study because residence halls are relatively controlled environments where many variables can be controlled. Two residence halls were selected because of similarities in the following areas: number of students, number of employees, campus location, age, sex, and class standing. Both residence halls had an openly gay hall director. Hall A was used as a comparison group and Hall B as a treatment group. Residents in both halls were given a questionnaire at the beginning of the academic year (pre-test) and at the end of the academic year (post-test). Group equivalence was tested; the pre-test results show statistically high group correlation. Therefore, the changes within groups was said to be related to the lack of treatment for the comparison group and treatment for the treatment group.

To develop a treatment plan it was determined that a simple use of films would probably not change attitudes in a positive (more

liberal/accepting) direction, but might actually change attitudes in a negative (less liberal/accepting) direction (Gilliam & Seltzer, 1989). Some research (Larson, 1981) suggests that, while exposure to educational media (films) can be beneficial in bringing about positive changes in attitudes, the greatest amount of positive change results from exposure to individuals different from yourself. The treatment plan combined these methods and offered films followed by discussion, and/or panel discussions on a monthly basis for 8 months.

For the purpose of this study, the first question used from the questionnaire (Question 4) asked, "What would your comfort level be if your roommate is of a different sexual orientation from your own?" The pre-test results demonstrate high group equivalence, with a comparison group mean of 3.47 and a treatment group mean of 3.67. The equivalence of the pre-test results allowed the inference that the difference in attitudes within groups across time was a direct result of the lack of treatment or treatment. Within the comparison group there was an overall decrease (group mean 4.23) in liberal/accepting attitudes toward a roommate who had a different sexual orientation from their own. The treatment group displayed an overall increase (group mean 2.64) in liberal/accepting attitude toward a roommate who had a different sexual orientation from their own. The treatment did have a positive (more liberal/accepting) effect on student attitudes toward a roommate with a sexual orientation different from their own.

The second question (Question 6) asked students to "Rate the following situations from the most comfortable (1) to the least comfortable (5)." The five situations were your roommate is confined to a wheelchair, your roommate is a foreign student with limited English skills, your roommate is 15 years older than you, your roommate is of a different sexual orientation, and your roommate is of an ethnicity other than your own. The pre-test results show that group equivalence is maintained, with a comparison group mean of 4.03 and a treatment group

mean of 3.94. These mean scores showed that students rate living with a person who has a different sexual orientation from their own as very uncomfortable.

The post-test results showed a slight but meaningful change within groups across time. The comparison group appeared to have become even less comfortable (mean score of 4.18) with the possibility of having a roommate who had a different sexual orientation from their own. This decrease in liberal/accepting attitude can be said to relate to the lack of treatment. The treatment group had an increase in comfort level (mean score of 3.26) with the possibility of having a roommate who has a different sexual orientation from their own. This increase in liberal/accepting attitude can be said to relate to the treatment received by the group.

The last three questions (7, 8, and 11) asked participants to describe their attitudes of a specific situation using three words from a list of 25 words. These words were rated from most liberal/accepting to least liberal/accepting. A frequency distribution was calculated showing percentages for the three individual responses. A comparison was made of the pre-test responses for the comparison and treatment groups to, again, showed group equivalence. Comparisons were also made of pre-test and post-test results within and across groups.

Question 7 asked participants to "Choose three words which best describe your attitudes toward people with a sexual orientation other than your own." This question was used to assess students attitudes toward sexual diversity not specifically related to a living/roommate situation. The frequency distribution for the pre-test does showed group congruence. The post-test results can be related to the lack of treatment for the comparison group, and treatment for the treatment group. These results show an increase of the less liberal/accepting words for the comparison group and an increase of the more liberal/accepting words for the treatment group. Therefore, the lack of

treatment for the comparison group enabled attitudes toward sexual diversity to become less liberal/accepting. Further, the treatment for the treatment group encouraged a more liberal/accepting attitude toward sexual diversity.

Question 8 asked participants to "Choose three words that best describe your perception of your parents' attitudes toward people with a sexual orientation other than their own." This question was asked to assess the possible affinity of students' attitudes and their parents' attitudes toward sexual diversity. The pre-test results continue to establish group equivalence. By comparing the pre-test and post-test results within the groups we continue to find changes across time. An increase in less liberal/accepting word use can be seen in the comparison group--meaning that perception of parental attitudes toward sexual diversity has become less liberal/accepting over time. An increase in more liberal/accepting word use was seen for the treatment group--meaning that perception of parental attitudes toward sexual diversity had become more liberal/accepting over time. These changes in the students' perception of parental attitudes cannot be said to relate to treatment. However, when comparing student word use from the previous question (Question 7) student attitudes tend to mimic the parental attitudes as perceived by the student.

The final question (Question 11) asked students to "Choose three words which best describe your attitudes toward people with a sexual orientation similar to your own." This question was asked to assess students' attitudes toward sexuality--not specifically related to sexual diversity. The pre-test results show a high correlation between the comparison and treatment groups. These results seem to indicate some conservative feelings towards sexuality. The post-test results indicate only slight differences from within groups and even less differences across groups. These results indicate that students appear to have a difficult time with the subject of sexuality. Further, because the

difference across time is negligible, it is assumed that the treatment did not have an effect on attitudes toward sexuality in general.

Conclusions

As group equivalence was high, it can be assumed that changes within groups across time were related to the specified treatment. Student attitudes toward sexual diversity can be changed. By creating a medium in which students are exposed to others with a different sexual orientation from their own and are allowed/encouraged to participate in discussion--they can become more liberal/accepting.

Limitations of the Study

Although changes have been seen in this study there are several limitations that need to be taken into consideration. Some of them are

1. It cannot be said that all the changes are due to the lack of treatment (comparison group) or the treatment (treatment group) within the groups.
2. Much consideration was given to control for many variables (age, sex, location, openly gay hall director, etc.) but other variables not considered for this study may have had an impact.
3. The treatment plan itself has not been manipulated to show which aspect of treatment has the most impact.
4. The researcher made no effort to connect an individual's pre-test and post-test questionnaire to show individuals' attitude change over time.
5. The forced response questions (7, 8, and 11) offered too many words to use in a statistically meaningful way.
6. Since sexuality appears to be a difficult area for college students, some of the negative attitudes toward sexual diversity may be skewed.

7. The openly gay hall director at Hall A was heavily involved in conduct matters and the openly gay hall director at Hall B was only peripherally involved with conduct.

Recommendations for Further Research

It can be concluded that this study answered several questions regarding college students' attitudes toward sexual diversity. This information can be used in areas of further study that are left yet unanswered. Some areas to consider for further research are

1. Measuring parental attitudes directly from parents to assess affinity of student attitudes.
2. Measuring individuals' attitude changes over time regarding sexual diversity.
3. A more in depth assessment of the effects of different treatment plans as they relate to changing attitudes toward sexual diversity.
4. A measure of sex difference in attitudes toward sexual diversity.

Researcher's Statement

This research has shown that attitudes toward sexual diversity of college students can be changed through focused programming efforts. Further, we have learned that the topic of sexuality is one in which traditional college-age students have a high level of discomfort. As AIDS becomes more widely spread in this age group it is prudent to develop further specific programs to increase awareness and comfort regarding sexuality. It is only through these efforts we will reduce the spread of this deadly disease within this age group as we begin to open students' eyes to the fact that everyone is at risk. In 1994 comfort regarding sexual issues is only through silence--where is the comfort of silence in death?

APPENDIX A
HUMAN SUBJECTS APPROVAL

Human Subjects Committee



1690 N. Warren (Bldg. 526B)
Tucson, Arizona 85724
(602) 626-6721 or 626-7575

October 14, 1993

Richard Kelly Morris, Master's Candidate
c/o Betty J. Newlon, Ed.D.
Department Counseling/Guidance
Esquire Apartments, Ste. 210
1230 N. Park Avenue
Campus Mail

RE: CHANGING COLLEGE STUDENT'S ATTITUDES TOWARD SEXUAL DIVERSITY

Dear Mr. Morris:

We received your above-cited research proposal. Regulations published by the U.S. Department of Health and Human Services [45 CFR Part 46.101(b)(2)] exempt this type of research from review by our Committee.

Thank you for informing us of your work. If you have any questions concerning the above, please contact this office.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "William F. Denny".

William F. Denny, M.D.
Chairman
Human Subjects Committee

WFD:rs

cc: Departmental/College Review Committee

APPENDIX B
SURVEY INSTRUMENT

Diversity Questionnaire

The University of Arizona strives to create a campus environment which understands, fosters, and embraces the value of diversity among students, faculty, and staff. Diversity encompasses differences in age, color, ethnicity, gender, national origin, disability or handicap, race, religion, sexual orientation, socioeconomic background, Vietnam Era veteran status, or unique individual style. This institution is committed to the belief that all persons are valued for their individual characteristics, talents and contributions.

The above statement was approved by the University of Arizona's President's Council in September, 1991. In order to better understand attitudes about diversity issues your Hall Director and Assistant Hall Director, Rachel Meeker and Kelly Morris, are conducting this survey among students living in residence halls. This questionnaire does not cover all diversity issues but rather targets areas that generate greater emotion than others. This is an anonymous survey. Please take a few minutes to answer as openly and honestly as possible. Thank you for your cooperation.

1. Are you Male or Female? (circle one)
2. Please indicate your age in years ____
3. Please circle the ethnicity that you identify yourself as: African American, Asian American, Hispanic American, Native American, Pacific Islander, White, Other

For the following questions please circle the response that best describes your feelings.

4. What would your comfort level be if your roommate is:

	Very Comfortable (VC)	Comfortable (C)	Uncertain (U)	Uncomfortable (UC)	Very Uncomfortable (VUC)
a.	15 years older than you.			VC C U UC VUC	
b.	of an ethnicity other than your own.			VC C U UC VUC	
c.	confined to a wheelchair.			VC C U UC VUC	
d.	of a different sexual orientation.			VC C U UC VUC	
e.	a foreign student with limited English skills.			VC C U UC VUC	

5. Have you personally ever experienced discrimination? (circle one)
Yes No Not sure

If yes, how frequently? (circle one)

Rarely Sometimes Often

6. Rate the following situations from the most comfortable situation (1) to the least comfortable situation (5).

- ____ Your roommate is confined to a wheelchair.
 ____ Your roommate is a foreign student with limited English skills.
 ____ Your roommate is 15 years older than you.
 ____ Your roommate is of a different sexual orientation.
 ____ Your roommate is of an ethnicity other than your own.

Discomfort
Tolerant
Empathetic
Closed
Comfortable

Appreciative
Critical
Understanding
Prejudiced
Judgmental

Open
Interested
Acceptant
Ambivalent
Compassionate

Tense
Guarded
Hostile
Undecided
Sympathetic

Caring
Afraid
Embracing
Indifferent
Embarrassed

From the word list above, choose 3 words which best describe:

7. Your attitudes toward people with a sexual orientation other than your own.

8. Your perception of your parents' attitudes toward people with a sexual orientation other than their own.

9. Your attitudes toward people with an ethnic background other than your own.

10. Your perception of your parents' attitudes toward people with an ethnic background other than their own.

11. Your attitudes toward people with a sexual orientation similar to your own.

12. Your attitudes toward people with an ethnic background similar to your own.

13. What one issue dealing with diversity do you think will be most important to you during this year in college?

14. Please make any comments you would like to regarding the contents of this survey.

Thank you for the time it has taken you to complete this survey! Please submit the completed survey to your Resident Assistant.

APPENDIX C
STATEMENT TO RESIDENT ASSISTANTS
FOLLOWING INITIAL MEETING

Dear Resident Assistant:

Thank you for helping me gather information for my Master's thesis. Following are the instructions for you and your residents.

1. During your regularly scheduled wing meeting, please read the following statement:

At the end of this meeting I will be handing out a questionnaire that asks you to answer questions about different diversity issues. This is an anonymous survey-- please do not write your name on it. The information gathered from this survey will be used in a graduate student's thesis. Participation is not mandatory. By completing the questionnaire you are volunteering to be a participant in this study. Again, you are not required to participate.

2. At the end of your wing business, remove the blank questionnaires from the manilla envelope and pass them out to your residents. As the questionnaires are being handed out, please read the following statement:

If you are going to participate in this study, please take a few minutes to complete the questionnaire now and hand it back in to me. If you don't have time to complete the questionnaire now, you may hand it in to me in 24 hours.

3. As completed questionnaires are returned, place them back in the manilla envelope.
4. I will collect the manilla envelopes containing the completed questionnaires directly from you.

If you have any questions or concerns, please do not hesitate to contact me. Thank you for your assistance.

Sincerely,

R. K. Morris
Graduate Student

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