

CHAPTER 5

DISCUSSION

Overview

In this discussion I will first summarize the findings, and then point out some methodological issues that help or hinder achieving the desired understanding of attitude influences. Next I will comment on demographic influences on this research effort, the analysis results, and attitude formation. Fourth, I will point out the contribution of social construction theory to conceptualizing both the study and its results. Fifth, I discuss the influence of teaching and learning practices on data collection, impact of topic issues, and attitude change. I include findings on cognitive effort and commitment to one's opinion in this discussion as they are pertinent to effective teaching methods and learning environment. Sixth, I present moral development of the student and limitations of a single time reference. Finally, I discuss attitude repeated measure results at the beginning and end of the semester. In the conclusion, I present a summary of findings and implications, suggested improvements in research design, and ideas for future research.

Summary of Findings

Higher attitude scores indicated greater respect for diversity and individual choices. Demographic influences on attitudes included sex, in which women scored higher on average attitudes than men in the topics of gender, sexual orientation, and sexual coercion. Men and women had similar levels of attitude scores on sex education. Self-described religious background was significant in that religiously conservative participants, 50% of the sample, scored lower on attitudes about sexual orientation than participants who described themselves as liberals or those reporting they have no religious background. Women's comments regarding the gender class presentation scored significantly higher on personal relevance to one's own life, favorability toward the presentation, and level of affect.

A goal of the study was to measure attitude change over the semester. Attitudes about sexual orientation and, to a lesser extent, sexual coercion changed over the semester in a direction of increased sensitivity to diversity and individual choice. Semester attitude difference scores were significantly higher than difference scores recorded for the single multimedia session early in the semester on attitudes about sexual orientation, sex education, and sexual coercion, and for the single multimedia session late in the semester on attitudes about sexual orientation.

Attitude scores at Time 1 and Time 3 and attitude difference scores from Time 1 to Time 3 were compared to the results of coding end-of-class comments for moral development and factors contributing to cognitive effort and commitment to one's initial attitude. Level of moral development, significantly higher for women regarding sexual orientation and sexual coercion, was significantly and positively related to overall attitudes about sexual orientation and sexual coercion. Level of moral development scores were significant regarding gender comment coding results for perspective-taking, favorability toward the class presentations on sexual orientation and sex education, repetitive exposure to a topic, distraction from the sexual orientation presentation, and cognitive effort exerted in considering the messages of the gender, sexual orientation, and sex education presentations.

Attitudes were not influenced by affect or commitment to one's opinion, but attitude scores were significantly related to personal relevance, especially regarding gender and sexual orientation; life experience regarding sexual orientation; and favorability toward the class presentation for all topics. Repetitive exposure to information about sexual coercion was significant for higher attitude scores at Time 3 for participants reporting little prior exposure and considerable prior exposure, and lower attitude scores for participants reporting only some prior exposure.

Methodological Issues

The combination of quantitative and qualitative data collection was designed to elicit both an overall picture of the attitudes of college students about topics of human sexuality and the idiosyncratic beliefs and approaches of the individuals holding those attitudes. The combined quantitative and qualitative data were used in a complementary fashion to get the most insight available from each method's strength. The numeric attitude survey results measured attitude levels and attitude change from the beginning to the end of the semester. The qualitative data coding was grounded in attitude and development theory and contributed to understanding social construction of attitudes, a process in a classroom that involves students, instructors, guest speakers, and the university environment as a whole.

As the data were collected and analyses done several methodological questions became apparent. These questions or issues underlie the findings discussed further in this chapter, so they are examined now. First, repeated measures statistical designs can be affected by regression toward the mean. If "two variables are positively but not perfectly correlated, then people who are high on one of the variables will also tend to be high on the other variable, but relatively less so. Similarly, people who are low on one of the variables will also tend to be low on the other variable, but relatively less so" (Pedhazur & Schmelkin, 1991, p. 226). In Hypothesis 7, I predicted that high commitment to one's opinion early in the semester would be associated with less change of opinion than lower expressed commitment. This did not hold true for the extreme attitude scores. Across all four topics in this study, students scoring in the top 10% of attitudes early in the semester recorded, on the average, reductions in attitude at the end of the semester. Students scoring in the bottom 10% of attitudes early in the semester recorded, on the average, higher attitudes at the end of the semester. Students scoring in the middle 80% of attitudes early in the semester recorded, on the average, significantly higher attitude scores at the end of the semester for attitudes about sexual orientation and sexual coercion, but not for attitudes about gender and sex education. Implications of this phenomenon concern error both random and of factors unique to the situation. With random error, regression toward the mean is likely to happen to some extent in any repeated measure design (Pedhazur & Schmelkin, 1991). In the case of factors unique to this situation, attitudes for two topics showed no significant change over the semester. Sex education started with a high average score and a ceiling effect occurred as there was little room for improvement. Findings for gender are not useful for reasons discussed below regarding scale reliability.

A second issue of concern is the reliability of the attitude scales. It was apparent from an initial face validity analysis by myself and Dr. Benson that all six of the items for each topic would not fit the same conceptual pattern. For example, one gender item explored a stereotypical view of male-female communication patterns and results might be expected to differ by sex of participant, but the results do not say anything about the participant's attitude toward gender. Face validity and Cronbach's Alpha analysis resulted in selection of four of the available six items for use in scales measuring attitudes about gender, sex education, and sexual coercion, and five of the available six in a scale measuring attitudes about sexual orientation. Only the sexual orientation scale scored an

alpha value over .70. Scale reliability is particularly of concern in the lack of significant change in the middle 80% for attitudes about gender. Use of previously validated scales and items might have provided results with a higher reliability value. This would have allowed me to compare results of this study with other studies in the domain of human sexuality issues. Lack of significant findings on attitude change over the semester and interaction of attitude scores with other variables may be a result of the inadequate scales more than a lack of significant shifts in the class attitudes. Indeed, attitudes about sexual orientation were consistently the most significant in most areas of analysis.

A third measurement issue concerns the elicitation of comments from the classes during the semester, particularly the four class comment sets used in this study. It was often difficult to code for some of the influences because the comments tended to be brief. The initial purpose of the comments was to encourage reflective thinking, gain feedback on class reactions, and track attendance. Some students tended to answer questions in the most straightforward or brief manner. Students who elaborated on their own initiative provided some very interesting insight into their thinking, information which often was not apparent in the initial sentences. A different question design, therefore, might have elicited more in-depth comments. Some question formats were more likely to elicit complexity of thought than were others. For example, the format of a sequence of questions as used in the class on gender would have been useful for the sexual coercion class in which a sequence of video segments was presented. Some students made an effort to address each stage of the presentation, but most gave a more general response to the very general request to comment on the lecture and what they had learned. Bonwell and Eison (1991) discussed the various ways to improve questioning techniques to encourage more active learning and reflective thinking in the classroom. They recommended three types of questions to encourage divergent thinking: the playground question, in which a specific aspect is chosen for intensive study; the brainstorm question, in which students are encouraged to come up with a lot of ideas quickly; and the focal question, in which students are presented a limited topic and alternative views to consider. Considered in this manner, the questions used to elicit comments for this study were too broad and one of the above suggestions, especially the playground question, probably would have yielded more in-depth answers.

Finally, approximately one-quarter of the students indicated at the end of the survey that they would have liked the opportunity to elaborate on their answers during the survey and found it frustrating to be restricted to a scale, particularly if they disagreed with the choices presented with the item (Hergert, 1997). Previously validated scales would help insure understandable and consistently interpretable items and results. However, this is always a dilemma in quantitative research and the combination of numeric indicators and opportunity for comment should be an option in future research. Investigations of sensitive subject matter, as is usually the case in topics regarding human sexuality, would be especially vulnerable to idiosyncratic responses.

Methodological integrity is the foundation of any research effort and can be considered secondary only to the research question in determining the usefulness of the results (Pedhazur & Schmelkin, 1991). The methodological issues raised here are not insurmountable nor do they prevent useful interpretations of the data analyses. They do, however, suggest the need for caution in generalizing the results.

Demographic Issues

A large amount of demographic information was collected during the attitude survey. Detailed lists of demographic questions and possible answers are provided in Appendix A. The students were described by Hergert (1997) as a diverse group due to a 10 year span in ages and representation from several ethnic backgrounds, religions, and

colleges within the university. The number of over 20, non-white, non-Christian, and non-Human Resources and Education participants is not, however, representative of the population of the university. The vast majority of participants were white, Christian, and age 19 or 20, with the largest group of students from the College of Human Resources and Education. Although there was some significant variation in some attitudes by age, major, and religious background, sex differences provided the most useful view of the student participants. Women were over-represented in the College of Human Resources and Education majors group and underrepresented, but not absent, in most of the others. Women also reported that they were more influenced by college courses in their views on human sexuality and they were more likely to have higher attitude scores concerning gender, sexual orientation, and sexual coercion. Research has shown that men, especially those in their teens and twenties, often express more negative attitudes toward gay and lesbian issues (Ellis & Vasseur, 1993; Pratte, 1993). That tendency was supported in this study. In addition, participants claiming a conservative religious background, 50% of the sample, scored significantly lower on attitudes about sexual orientation than participants with liberal or no religious backgrounds, but religious background did not differ significantly by sex.

Sex differences in attitudes are rooted in socially constructed expectations for men and women in our culture and political system (Hare-Mustin & Maracek, 1990). Women often are expected to be the protectors of virtue and defenders of the helpless in a way that leaves men free to deny responsibility for choices that harm others. Lloyd (1991) described the manner in which these expectations at their extremes can lead to relationship violence as women are expected to maintain a relationship and men to control it. The analysis of end-of-class comments supports evidence of a significant tendency for women to relate more personally and men to relate more abstractly. Life experience was significant for sex differences in attitudes about sexual orientation and sexual coercion. In their comments after the L. B. G. A. presentation, women were more likely to reflect on their own or others' experience and men were more likely to make reference to abstract, impersonal experience. After the sexual coercion presentation, women were more likely to mention their own experience of being coerced and men to mention the experience of a person they knew. No one admitted to engaging in sexually coercive behavior against another, and no male mentioned an experience of being sexually coerced. Personal relevance, either anticipated or historical, was more often remarked by women and hypothetical or no relevance more often remarked by men in reaction to the gender and sexual orientation presentations. The tendency to personalize rather than objectify could be a result of socio-cultural gender differences, however, in this sample, it could also be influenced by another sex-differentiated factors—major. Women were represented more heavily in fields that encourage consideration of these issues in several courses and contexts; men more heavily in fields in which these topics are much less likely to be addressed.

The demographic trends cited here are not reflective of the larger population. College-age non-students are significantly more homophobic than college students (Pratte, 1993), and students enrolled in human sexuality courses appear to be the more tolerant among college students (Stevenson, 1990). Efforts to study attitudes within the general population should continue, as should efforts to educate about human sexuality issues of gender, sexual orientation, sex education, and sexual coercion.

Theoretical Issues

The overarching theory guiding this research is the social construction of attitudes. Attitudes have been defined as expressions of social judgment. The language we choose to phrase a question or statement is loaded with attitude cues about a topic of conversation and

the message is received by the listener, often without any direct reference to the object of judgment (Ellis & Vasseur, 1993; Gergen, 1985). This embeddedness of attitude goes unnoticed by most people, and the domain of human sexuality is rife with assumptions about normality and rightness.

Each of the four topics selected for this research effort involve controversy over what is right and the limits of human behavior. Each of the class presentations challenged the notion that any particular group should have a claim to moral superiority over others. Respect for individual choice and diversity were encouraged. The social construction of attitude was addressed in each class by emphasizing how our culture creates and encourages some attitudes over others, or how we as people have choices in how to regard our fellows. In the class about gender, for example, the video “The Fairer Sex?” was shown to encourage discussion about how men and women are treated differently. In the class about sexual orientation, L. B. G. A. members disseminated information and spoke of their experiences in coming out to themselves, family, and friends. In the class on sex education, different philosophies and methods of teaching children and adolescents about human sexuality were presented and illustrated using a CNN video provided to the instructors with the textbook. Normalizing sexual development and developmentally appropriate questions and concerns emphasized that each individual’s questions should be respected. In the class on sexual coercion, multiple coercive situations were presented within the context of consent defined as saying yes, and not as not saying no. In each class, students were encouraged to consider how they acquired their own attitudes about the issues and how others, involved differently, might have acquired different attitudes. An increase in attitude score should indicate an increase in respect for diversity, the rights of others, and individual choice.

Teaching and Learning Issues

In addressing the needs of college-age students and a class on human sexuality, it would appear to be imperative to meet the student where she or he is in cognitive and emotional understanding of an issue. The challenge to consider concepts too far removed in experience or beliefs seriously limits the instructor’s ability to engage the student in collaborative learning. To simply lecture on the facts, or to present a scenario foreign to the listener, will not change attitude. The listener must be actively involved in the process of learning (Brown, 1994; Brown, Collins, & Duguid, 1989).

Another point of concern in the teaching and learning process is the variation in ideologies among students. In this situation, the study sample was 50% religiously conservative. Religious background was shown to significantly affect attitudes about sexual orientation. A question arises as to whether these instructors were attempting to change the religious ideology of religiously conservative students. The course description in the university catalog stated:

Developmental approach to human sexuality. Examination of psychological, biological, and socio-cultural contributions to theory, research, and functional applications of human sexual behavior.

The description in the course syllabus more specifically stated:

This course involves a developmental approach to the topic of human sexuality, utilizing historical, biological, and socio-cultural perspectives of sexual development and behavior. We place particular emphasis on the social construction of sexuality and on inviting each class member to accept responsibility for their personal sexual attitudes and decisions. Our specific objectives include:

- To examine human sexuality through historical, biological, and socio-cultural lenses.
- To examine current significant developments in the area of human sexuality.
- To encourage development of criteria or standards by which personal sexual behavior is determined.
- To promote awareness and tolerance of diversity.
- To encourage integration of the material with personal understandings and beliefs about sexuality.

I propose that an ideological stance that denigrates another's ideological stance is in opposition to the function of the university as a situation existing for the free exchange of ideas. A caveat exists when the ideas involve individual harm. The free expression of ideas encouraging sexual coercion or homophobia, and the implications in these vocalized ideas for encouraging physical and emotional harm to individuals, cannot be silently accepted by responsible authorities without tacitly accepting harm to individuals and the marginalization of groups of individuals. Freedom of religious beliefs and expression includes the responsibility to clarify where individual belief ends and marginalization of groups or individuals begins. Understanding the social construction of these ideas and beliefs is an important part of human sexuality education and this clarification process can help students recognize the border country of expression of ideas and the translation of those ideas into action, particularly harmful action. Rather than contradict a student's beliefs, exploration of ideas about human sexuality and their affect on real lives can clarify a student's beliefs and help the student take responsibility for her or his decisions in the future.

Students already enrolled in courses concerning human and family development have been exposed to many of the issues raised in this course on human sexuality, and will have the opportunity to explore these issues in such courses as gender roles, families and children under stress, addictions and the family, marriage and family dynamics. The human sexuality course, however, is unique among this department's courses for the high student enrollment from other colleges (74%), including a large number of students whose exposure to these issues in the teaching and learning context of the university has been and will be minimal. This course may be the only chance to inform and challenge assumptions among these students on these issues. The challenge to the instructors is both to meet the students at their level of understanding, which in most ways is highly varied, and to present the dilemmas within the topic domain in as much of a real-life mode as possible. There is a temptation to shock in order to gain attention, however, the high emotion sequelae of shocking material can interfere with thoughtful consideration of the issues (Edwards, 1990). In addition, the target population of college students is somewhat inured to shocking media messages (Jhally, 1995). The success of the L. B. G. A. presentation may point to a way to make the material come to life in a compelling manner that encourages meeting on the common ground of our human experience, an experience that does not depend on academic background.

In Hypothesis 4, cognitive effort was proposed to be influential in attitude level and degree of change. Significant variation of attitude scores among cognitive effort groups was found only for sexual orientation attitudes at Time 1 and Time 3 and for sexual coercion attitudes only at Time 1. No topic was significant for cognitive effort and attitude difference scores from Time 1 to Time 3. The lack of significance in this is probably a matter of questioning method and the brevity of the comments. More focused or divergent thinking questioning might have created more in-depth and insightful comments for analysis.

In examining the end-of-class comments and comparing the various possible influences on attitude change, favorability toward the presentation emerged as a primary

factor significantly correlating with attitude level. All but two attitude topics at the beginning and the end of the semester were significantly more likely to have higher attitude scores with higher favorability scores, and all of them were significant for linearity. There was no significant difference between negative, neutral, and positive favorability in attitude difference scores from the beginning to the end of the semester. Higher favorability toward the presentation scores could be construed as the session having successfully met the student's level of understanding and emotional acceptance of the topic. Of course, the fact that those who agree with me also score higher on the scale I designed could be a factor. However, the favorability toward the presentation did not automatically mean that the participant agreed with the instructor. Several student comments indicated favorability toward the presentation as a challenging and rewarding experience even though they held different views than the instructor.

Only one influence, commitment to initial opinion, showed significant differences among groups in change of measured attitudes about sexual orientation from the beginning to the end of the semester. Commitment did not influence other topical attitude change, thereby further refuting Hypothesis 7. In this comparison, those unsure of their opinion and those still sure of their opinion significantly increased in measured attitude and those who had stated they were willing to reconsider their opinion remained the same, which is the opposite of the expected pattern. Examination of individual scores shows that most participants willing to reconsider their opinion evidenced close to no change at all, a couple showed a large increase in attitude score at the end of the semester over the beginning attitude score, and several registered large drops in attitude score at the end of the semester. The comments are available to help us understand what happened.

Large decrease: I wasn't comfortable with gays and lesbians before. But through this panel I realized that those people are the same as heterosexual people (not exactly, but...). I am a little more comfortable with them. (ID#100)
I have respect for the panel that we had today just for having the nerve to talk about it. I am not one that usually agrees with it but I do have respect. (ID#210)

Large increase: I really thought this panel was informative. I learned a lot more about gay lifestyle and how to be more open-minded, especially when it comes to children. (ID#256)
My reactions for today's speakers was very positive. As a foreigner, my culture sees gays and lesbians a little different but by listening to them today, I realize that they are normal people. Among my friends we assume that so and so is gay or lesbian but no one has really come out of the closet so it makes me wonder. I wouldn't treat them any different though. (ID#241)

The tones of the two types of comments are different, a difficult quality to quantify. The language of involvement with the class presentation of those whose scores decreased considerably seemed to carry a message of distance, indicated by use of vague and objectifying words like 'them' or 'it.' The language of involvement of those whose scores increased considerably seemed to indicate specific points of connection, like 'children' or 'my friends.' Participants indicating willingness to reconsider their opinion and who had minimally changed attitude scores were more openly uncomfortable with the panel than the participants whose scores decreased. The distance in these participants' comments, whose scores decreased, can mask homophobia from the instructor and, perhaps, even from the participant.

The class presentation with the most enthusiastic reaction was the class on sexual orientation. The numbers on favorability to presentation were clearly proportionally more positive than those for the other topics. This is the attitude shift that was the most

significant also. This class was peer-presented rather than instructor-presented. Several students remarked in their comments on the positive effects of having actual members of the gay/lesbian orientation group come to the class and talk. The attitude scores about sexual orientation started the semester at the lowest average and had less ceiling effect than the other topics. More can be done to test how these factors variously influence the final outcome of attitude change.

Moral Development Issues

In Hypothesis 1, I predicted that moral development level and attitudes would be positively related. Sexual orientation was the only topic in which moral development was significantly related to attitude score in the expected direction, that is, a higher attitude score correlated with a higher moral development score. In Hypothesis 3, I predicted that moral development and cognitive effort would be related. This appeared to be generally true, particularly if a participant indicated repeated exposure to the topic and the issues it entails. A more complex schema with which to consider a message and its implications is more well-developed over repeated exposures. The contextual considerations would become more apparent, thereby leading to a higher moral development score, and the attention to the message would be more focused and more easily addressed in the brief comment format provided at the end of the class.

The topic of sexual orientation was a window into the process of challenging heterosexism. By asking the L. B. G. A. students to lead the panel and discussion, the instructors stepped out of the way and facilitated direct communication among students. Many students directly commented on this as a very positive part of the class experience. "I think lectures by people who really know what they are talking about makes for a good informative class period." (ID#292) "I'm glad you had actual people come in and talk about their experiences instead of just lecturing about it." (ID#135) "I have never heard from a gay person their point of view. You only read about or hear of other stories. I think it's good to hear their stories about their life. It helps heterosexual people to understand their lifestyle." (ID#206)

Avery commented on Clark's description of "places we might find ourselves" (Avery, 1998) in exploring our own heterosexism. Students' comments reflected this notion of "places": of trying to normalize everyone's experience:

I don't think they are any different than anyone else. I think that everybody had something about them that is different (ID#224) Attitude score at Time 1 = 66.4; attitude score at Time 3 = 92.2;

or blaming society without personal responsibility:

I know that life can be difficult for them because society stigmatizes homosexuals, but I don't see this issue as a big deal at all. It's too bad that everyone can't accept it as a natural thing because it is! (ID#212) Attitude score at Time 1 = 99.4; attitude score at Time 3 = 96.2;

or reevaluating values:

I have always been indifferent about homosexuality, but I have a double standard- as long as it isn't someone close to me. This has been my first true education on homosexuality, I think now if one of my close friends told me I would be able to accept it. I also just wanted to say it was very courageous of them. Thank you. (ID#198) Attitude score at Time 1 = 80; attitude score at Time 3 = 72.4;

or internalizing change:

I've never known anyone directly who was gay and I've never seen anyone actually say they were gay. It was kind of a strange experience,

because I've always stereotyped gay people. Now it has shown me how shallow-minded I've been. These people are real and they have real feelings and I respect that. (#258) Attitude score at Time 1 = 2.6; attitude score at Time 3 = 13.6.

The furthering of moral development in these instances was the nudge away from an abstract or second-hand portrayal of the “alien other” to the personal interaction among people of similar age, background, and circumstance. Real-life people and dilemmas bring into focus the intensity of real-life consequences. A hypothetical situation, no matter how carefully considered, is unlikely to elicit dilemmas of identity and distressful consequences as described by Gilligan, Murphy, and Tappen (1990) and Perry (1970). Lecture, or even video or other media presentations, can be interpreted as hypothetical, not real, by the students. Guest speakers personally involved in the topic dilemmas can be very effective.

Consideration of real life experience rather than analysis of hypothetical situations is important for two reasons. First, attitudes do not necessarily reflect behavior (Eiser, 1994). Second, affective involvement is more potent when consequences are real and irreversible (Ford & Lowery, 1986; Gilligan et al., 1990). When both affective and cognitive processes are involved in considering an issue, the strength of behavioral prediction is higher (Petty & Krosnick, 1995). How respondents talked and thought about situations in research on gender and moral development was more important to understanding the level of moral development than the actual dilemma resolution (Ford & Lowery, 1986). Usefulness of student texts to understand the level of moral development was, therefore, higher with a real-life dilemma with real consequences than a hypothetical dilemma.

This was a very interesting class. I'm glad you had real people come in and talk about their experiences instead of just lecturing about it. It's good to have information from people because they're laid back enough to joke about it and realize that it is a new and kind of weird thing to understand when you're straight. (ID#135) Attitude score at Time 1 = 68.8; attitude score at Time 3 = 91.4.

Particularly touching was the statement of a student struggling with her own sexual orientation.

I'm so glad that you had lesbians and gay guys come to talk. Because I've had feelings of homosexuality. Actually I'm still not sure - so I'm trying to work things out. But to have these people come in has really changed my life. (ID#118)

Finally, moral development as a concept influences more than an individual's decisions along a life course. Implications of cultural understanding of morality can influence processes that have national consequences. Henry Louis Gates, Jr., a Harvard University theologian, commented on the demise of loyalty as a respected quality among political professionals. He discussed the Kennedy, Johnson, and Nixon inner circles as loyal, but operating at Kohlberg's third stage of moral development; and the more contemporary loyalty to a self-defined universal ideal distinct from people and situations at Kohlberg's fifth and sixth stages. He cited the connection between loyalty and lies in Nixon's Watergate constitutional crisis as a major source of loyalty's later disrepute, yet he questioned whether private connections of loyalty should be ignored in favor of universal ideals of justice and judgment: “The difference between Stage 3 and Stage 6 is ... the difference between a mensch and a monster” (Gates, 1998, p. 41).

The idea that the great goods of truth and justice should sometimes bow to personal loyalty is actually something that a lot of Americans—call us Kohlberg's primitives—take for granted... It explains why most Americans admired Hillary Clinton's staunch display of solidarity with her errant, embattled husband—a display that our high scorers knew to be worthy only

of derision. It explains why most Americans were sickened when Kenneth Starr commanded Monica Lewinsky's mother to give testimony that might inculcate her daughter.

In what we might think of as Kenneth Starr's America—a nation where the imperative to root out “impropriety” gleefully sets secretaries against their bosses, friends against friends, mothers against daughters—personal loyalty has no place. For what is Starr but our legally deputized Stage Sixer, policing his fallen countrymen as they struggle with the gummy, vexed exigencies of the merely human? Starr's righteousness offends our sense of humanity not because it is feigned but because it isn't. (p.44)

An appreciation of a richer social texture of trust and loyalty—of a social ethic founded upon the intricately reciprocal character of a life lived within community—doesn't mean setting the clock back to Camelot, either Kennedy's or Arthur's. But it does mean learning to talk about right and wrong without recourse to abstract principles ... no rule book, no moral abacus, can specify which values must prevail in every instance. Often loyalty must give way to “principle”—this we know—but aren't there times, too, when principle must give way to loyalty? (p. 44)

Attitudes and Attitude Change Issues

Of the four topics, sexual orientation was the only topic consistently to show significant findings in the expected direction of change in attitude over the semester, as predicted in Hypothesis 2. Attitudes about sexual coercion showed mixed results and attitudes about gender and sex education did not significantly change. Several contributions to the significance of attitudes about sexual orientation exist besides the issue of scale reliability, addressed earlier in the discussion. First, this was the only topic that a large proportion of students had not addressed prior to registering for this class. Students reported whether they had considered this topic previously. Twenty-nine percent reported knowing little about and being surprised by the class presentation on both sexual orientation and gender, 2% by the class concerning sex education, and 15% by the class concerning sexual coercion. The sexual coercion class presentation included several videos and anecdotal stories as well as information. The sexual orientation class, however, really seemed to affect students by presenting them with ordinary, real-life peers who were honestly and courageously presenting their own experience in a matter-of-fact yet humorous and personable manner. It is not surprising that a thoroughly engaging experience like this class session would have more impact than a two-minute video clip and eight reflective questions, and that the null for Hypothesis 5 would be rejected.

In Hypothesis 6, I predicted that the four topics would vary in attitude patterns and in degree of change over the semester. This hypothesis was accepted and the four-topic average score is not an overall indicator of some sort of mega-human sexuality attitude. It would be interesting to see if these topic scores would become more integrated or congruent over the participants' lifetimes. The life experience of college-age people may not be varied enough, or of enough duration, to have encountered some of these issues in a meaningful manner thus far.

Conclusion

Findings in this study are mixed and where they do appear to be more useful, as with attitudes about sexual orientation, the underlying methodology is very influential.

Scale reliability levels should be improved in any future research in this area. Ceiling effects would need to be mitigated. Efforts to meet the students' level of thought and personalize the issues in some way were rewarded in the topics in which the presentations were more peer-oriented than lecture or information-oriented.

The usefulness of these findings would be enhanced by following up on the respondents after they have entered the world of work and family. Longitudinal analysis over a semester time period is a small piece of lifelong development. The length of time involved in developmental shifts of early adulthood would make 5-, 10-, and 15-year follow-ups optimal. Murphy and Gilligan (1980) described a major shift around age 27 from the relativity and abstract morality of late adolescence to the more personal and situationalized morality of a life lived in the aftermath of concrete choices. Thus, an interesting tactic for research in the future would be to plan for long-term longitudinal follow-up from the start of the project. It would then be possible to determine how their moral development progressed and what influences were at work in their lives. For example, gender often becomes a more salient topic for women after the birth of their first child and the cultural expectations of mothers as primary caregivers becomes more intrusive.

Considering the measurement limitations of this study, the results did indicate that attitudes could be changed significantly over a semester's course in human sexuality, that moral development was a significant influence on attitude level, that cognitive effort and commitment were less obviously significant, and that the domain of human sexuality is not homogenous. Future research would need to address the methodological deficiencies presented here, but longitudinal data could be very interesting in terms of shedding more light on the long term effects of the human sexuality course.