

1995

## **An assessment of secondary school counselors' HIV-related knowledge, attitude, and stage of moral development**

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# **UMI**

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**AN ASSESSMENT OF SECONDARY SCHOOL COUNSELORS'  
HIV-RELATED KNOWLEDGE, ATTITUDE, AND  
STAGE OF MORAL DEVELOPMENT**

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A Dissertation  
Presented to  
The Faculty of the School of Education  
The College of William and Mary in Virginia

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

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by  
Phyllis Johnston Jones  
September 1995

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by

Phyllis Johnston Jones

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Approved September 1995 by

  
Charles Gressard, Ph.D.  
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## DEDICATION

This work is dedicated to  
Samuel Bryson Jones,  
age 2 1/2, my model  
of morality.

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**AN ASSESSMENT OF SECONDARY SCHOOL COUNSELORS'  
HIV-RELATED KNOWLEDGE, ATTITUDE, AND STAGE  
OF MORAL DEVELOPMENT**

**Abstract**

This study focused on secondary school counselors employed in public schools in the state of Virginia. It investigated the direction and strength of the relationship of level of moral development, locus of control, HIV knowledge and HIV attitudes.

Locus of control was measured by Rotter's Internal-External Locus of Control Scale (I-E Scale). The Defining Issues Test (DIT) was used to assess counselor level of moral development. An HIV questionnaire examined counselor attitudes and knowledge. Kohlberg's theory of moral development provided the basis for the study.

It was hypothesized that the level of moral development would show a significant positive relationship with the counselors' HIV knowledge and a significant negative relationship with the counselors' HIV attitudes. Additional hypotheses suggested that the locus of control would relate positively to counselors' HIV attitudes and negatively with HIV knowledge. A significant negative correlation was

predicted between counselors' moral level of development and locus of control.

Of the 286 secondary schools contacted, 118 counselors elected to participate. They completed an HIV questionnaire, the I-E Scale, and the DIT. All assessments were conducted during the spring of 1995.

Data from the study were submitted to product-moment correlations to test the hypotheses. In addition, step-wise multiple regressions were used to analyze the survey variables: HIV attitude and HIV knowledge.

The data did not support a negative relationship between HIV knowledge and level of moral development. There was, however, a significant negative relationship between HIV attitude and level of moral development. There was statistical support for the existence of a negative correlation between locus of control and counselors' HIV knowledge. The positive relationship between locus of control and attitude was not supported. The study data supported the relationship between counselors' moral level of development and their locus of control. The higher the level of moral development, the lower (internal) the level of locus of control. Additional significant relationships were found and recorded. An analysis of responders versus non-responders on the DIT instrument was performed because of the large number of incomplete or unreturned test forms.

The study's data combined with the results of previous research suggested several areas of application: HIV education for counselors, college curriculum, counselor support groups, school systems, state departments, and professional organizations. While the results of the study apply specifically to secondary school counselors employed in the state of Virginia, there is no reason to believe that the specific location would affect the relationships between variables or limit the applicability to counselors in other states.

Suggestions for further study included expanding the survey to include middle school counselors or to include secondary school counselors in other states. Similar studies might be undertaken to assess counselors' attitudes and knowledge regarding gay adolescents or to determine the absence or presence of counselor homophobia. An additional area for exploration includes a survey of counselor education programs' inclusion or exclusion of HIV/AIDS training.

PHYLLIS JOHNSTON JONES

DEPARTMENT OF EDUCATION

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## **CHAPTER 1**

### **INTRODUCTION**

#### **Statement of the Problem**

The problem investigated in this study concerned the HIV-related knowledge and attitudes of secondary school counselors with particular emphasis on their stage of moral development and their locus of control.

#### **Justification for the Study**

The first cases of AIDS were reported in 1981 and appeared to be confined to a limited population that consisted of homosexual or bisexual men and HIV drug users. However, heterosexual transmission of the disease is increasing. Acquired Immune Deficiency Syndrome (AIDS) is now recognized as one of the fastest growing public health concerns in modern times. No longer the disease of an unpopular minority, the AIDS virus is spreading among teenagers. A recent study by Kipke and Hein (1990) indicates that AIDS is quickly becoming one of the leading causes of death among adolescents. A December, 1994 report from the Centers for Disease Control confirmed 1,965 AIDS cases among adolescents who were ages 13 through 19. The number of persons reported with AIDS in the age range of 20

to 24 years was 16,575. The Virginia Department of Health, as of July, 1995, reported 1,292 AIDS cases and 2,573 HIV cases in the 20's age range. With the incubation period for the disease varying from one to four years and longer, medical experts suspect that the HIV infection may have been contracted during adolescence and only became symptomatic during the 20's. For adolescents ages 13 through 19, the Virginia Department of Health reported (July, 1995) 29 AIDS cases and 191 HIV cases. Hein (1990) reports that the number of adolescents in New York City who are affected with the AIDS virus doubles every fourteen months. The rate of reported cases in teenagers roughly parallels that of the adults. "Newsweek" (1992) relates that "a 1990 study of blood samples drawn from the college students on nineteen campuses found that one student in 500 tested positive" (p. 45). It was further reported that in the last four years the ratio of female to male AIDS patients has doubled (17 percent to 39 percent).

Armed with false bravado and a sense of immortality, teenagers disregard the degenerative and fatal nature of AIDS. Because of their experimentation with sex and drugs, adolescents have been targeted as the next high-risk population for becoming infected with the Human Immunodeficiency Virus (HIV) widely believed to be AIDS.

"The need for effective programs to delay sexual activity and to educate teens regarding the HIV virus has

never been greater" (Helge, 1990). For some high-risk groups--hemophiliacs, gays, drug users--AIDS education has been effective. "But this approach isn't working for teens . . . teens are at the mercy of adults--parents, teachers, politicians--who often won't give young people the information they desperately need to make the right choices about their sexual behavior" ("Newsweek," 1992, p. 46). The most effective means for significantly reducing the spread of HIV infection is education. Already in a position that offers accessibility and confidentiality, secondary school counselors need to develop personal and educational strategies for working with the HIV/AIDS issue. "Youth will respond in a more positive and interested manner when they hear a message from a person they trust, whether it be a parent, friend, or counselor" (Helge, 1990). "The next few years could make a tremendous difference in the lives of American youth. If effective prevention programs are designed and implemented, the course of the future epidemic could be radically altered. . . The HIV epidemic threatens the viability, perhaps the very existence of this next generation" (Hein, 1990, p. 145).

The current focus of HIV awareness is on those professionals outside of the boundaries of the education system. Contrary to the theory of limited involvement, however, statistics indicate the schools need to take an active role in AIDS risk reduction education and counseling.

Counselors do not have to be experts, but they do need to understand the basic facts; to be aware of the resources available; and to be cognizant of their own personal thoughts and feelings regarding HIV/AIDS.

The purpose of the research was to assess the HIV-related knowledge and attitudes of secondary school counselors with a particular focus on stage of moral development and locus of control.

### **Theoretical Rationale**

Since the 1950's when his work first appeared as an unpublished doctoral dissertation, Lawrence Kohlberg has been instrumental in moving the study of moral development out of religion and philosophy and into the social sciences where it has been legitimized for scientific study. Sonnert and Commons (1992) credit Kohlberg with promulgating the most influential theory of moral development available for the investigation of both individuals and society. Not believing that moral development was the superego formation as espoused by psychologists, Kohlberg grounded his work in "the Piagetian alternative to cultural transmission (environmentalist and behaviorist) and romantic (maturationist and phenomenological) views in philosophy, psychology, and education" (DeVries, 1991, p. 7).

As recorded by Rich and DeVitis (1985), Kohlberg posits six developmental stages allotted to three moral levels:

I. Preconventional level

Stage 1: Orientation to punishment, obedience, and physical and material power. Rules are obeyed to avoid punishment.

Stage 2: Naive instrumental hedonistic orientation. The child conforms to obtain rewards.

II. Conventional level

Stage 3: "Good boy" orientation designed to win approval and maintain expectations of one's immediate group. The child conforms to avoid disapproval. One earns approval by being "nice."

Stage 4: Orientation to authority, law, and duty, to maintain a fixed order, whether social or religious. Right behavior consists of doing one's duty and abiding by the social order.

III. Postconventional, autonomous, or principled level

Stage 5: Social contract orientation, in which duties are defined in terms contract and the respect of others' rights. Emphasis is upon equality and mutual obligation within a democratic order. There is an awareness of relativism of personal values and the use of procedural rules in reaching consensus.

Stage 6: The morality of individual principles of conscience that have logical comprehensiveness and universality. Rightness of acts is determined by conscience in accord with ethical principles that appeal to comprehensiveness, universality, and consistency. These principles are not concrete, but general and abstract (pp. 88-89).

In The Psychology of Moral Development (1984), Kohlberg explicated his assignment of individuals to the three moral levels by comparing them to three different types of relationships between the self and the rules and expectations of society. The preconventional level consists of the majority of children under nine, some adolescents and a significant number of adolescent and adult criminal offenders. For the person in this level, rules and social expectations are external to the self. Most adolescents and adults, both in our society and in other societies, occupy the conventional level. For these individuals, the self has internalized the rules and expectations of others. The postconventional level is reached by a relatively small number of adults who have usually attained a minimum age of twenty. It is these people who have differentiated themselves from the rules and expectations of others and define their values in terms of self-chosen principles (pp. 172-173).

There is a hierarchical integration to Kohlberg's levels of moral development. That is, thinking at a higher stage includes with it, lower stage thinking with a preference for the highest stage available. An invariant sequence is formed by the stages with movement always forward to the next higher stage. Although they may be entered and left at varying times, change is gradual and no stages are skipped.

Through the use of hypothetical dilemmas, Kohlberg's initial investigation of moral judgments incorporated the study of how individuals analyze different types of situational contexts. Dawn (1990) presents his view on this topic as follows:

Whereas individuals would generally value property and condemn stealing, and value life and endorse its preservation, as examples, their judgments about these types of issues might vary in accordance with how they construe particular situational contexts (such as a context in which saving a life might require violating property rights.) In contrast with content assessments of preferences, or with knowledge-tapping endorsement or condemnation of moral prescriptions and proscriptions, the use of conflicts provided sufficiently rich situational contexts for the study of variations in moral precepts. These procedures constitute stimulus contexts for examining how individuals perceive social situations and apply their

moral concepts, which in turn allow for the type of probes that elicit responses reflecting the organization of judgments" (p. 34).

While attaining a higher stage of moral reasoning does not guarantee moral behavior, it is, as a single variable, a powerful influence on it. Welfel and Lipsitz (1983) reported on two studies that suggest that Kohlberg's theory of moral development may have particular relevance for understanding counselors' responses to ethically sensitive situations insofar as ethical behavior is a subset of moral behavior (p. 195).

In attempting to structure a theoretical framework for conceptualizing the moral (ethical) behavior of counselors, Paradise (1976) cited the work of Van Hoose (1971) who proposed that the rationale for counselor's ethical decision-making could be studied from a model of five qualitatively different orientation stages:

Stage 1. Punishment Orientation: Counselor decisions, suggestions, and courses of action are based on a strict adherence to prevailing rules and standards, i.e., one must be punished for bad behavior and rewarded for good behavior. The primary concern is the strict attention to the physical consequences of the decision.



Stage 2. Institutional Orientation: Counselor decisions, suggestions, and courses of action are based on a strict adherence to the rules and policies of the institution or agency. The correct posture is based upon the expectations of higher authorities.

Stage 3. Social Orientation: The maintenance of standards, approval of others, and the laws of society and the general public characterize this stage of ethical behavior. Concern is for duty and societal welfare.

Stage 4. Individual Orientation: The primary concern of the counselor is for the needs of the individual while avoiding the violation of laws and the rights of others. Concern for law and societal welfare is recognized, but is secondary to the needs of the individual.

Stage 5. Principle or Conscience Orientation: Concern for the individual is primary with little regard for the legal, professional, or societal consequences. What is right, in accord with self-chosen principles of conscience and internal ethical formulations, determines counselor behavior.

Studies of such professionals as lawyers, business executives and nurses reveal that most of them reach the conventional level, but many do not move beyond it. If

counselors are subject to the same trend, "then it is possible that differences in moral reasoning capacities could help explain the inconsistencies in moral and ethical behavior of counselors and the range in counselors' interpretations of the existing codes of ethics" (Welfel and Lipsitz, 1983, p. 195). Hayes (1994) suggests that counselors are only beginning to understand how Kohlberg's work relates to their own practice:

Kohlberg left a rich legacy of ideas that are proving sufficient to inspire the work of counselors who are following in the constructivist tradition for which he was so prominent a spokes-person. The years immediately ahead are likely to demonstrate the efficacy of applying Kohlberg's ideas to counseling practice. Counselors who attempt to conceptualize their work from a constructivist perspective may find they understand their clients more fully and perhaps themselves as well (p. 265).

#### **Definition of Terms**

For the purposes of this study, the following operational definitions were used (adapted from the Virginia Department of Education's HIVE/AIDS Prevention Curricular Guide, 1992; Rich and DeVitis, 1985):

AIDS (Acquired Immune Deficiency Syndrome): A usually fatal disease widely believed to be the human immunodeficiency

virus (HIV) that damages the body's immune system, making the body unable to fight infections and, therefore, susceptible to disease.

Attitude: A way of thinking, feeling, or acting; an opinion.

Bisexual: A sexual and or emotional attraction to people of both genders.

CDC (The Centers for Disease Control): A federal agency based in Atlanta, Georgia that studies and monitors the incidence and prevalence of disease in the U.S. and also provides health and safety guidelines for the prevention of disease; also provides resources to states to combat HIV/AIDS.

Epidemic: An illness or disease that occurs with much greater frequency in a given population than is expected (more people get sick than expected).

Gay: An individual who is attracted, both physically and emotionally, to persons of the same gender.

Hemophilia: A rare, inherited bleeding disorder of males in which normal blood clotting is not possible.

Hemophiliac: A person who has hemophilia.

Heterosexual: A person who is sexually attracted to people of the other gender; "straight."

HIV (Human Immunodeficiency Virus): The scientific name for the virus widely believed to cause AIDS by attacking T-

helper cells of the immune system and making the body susceptible to life-threatening opportunistic infections or rare cancers.

Homosexual: A person who is sexually attracted to people of the same gender; gay or lesbian.

Incubation Period: The time period between the actual entrance of germs into the body and the development of the symptoms of the disease the germs cause: for AIDS, often a period of eight to ten years or more.

Knowledge: Awareness; understanding; learning.

Level of Moral Development: Refers to Kohlberg's three moral levels: preconventional, conventional, and postconventional.

Locus of Control: For the externally oriented person, the outcome of a situation is controlled by a powerful being, fate, or chance; for the internally oriented person, there are high expectancies regarding their ability to control events.

Prevention: Taking action to keep something from happening.

Risk: An action that can eventually cause harm or loss; for example, the chance of being infected with HIV and developing AIDS.

Symptomatic HIV Infection: The condition that occurs when an individual has been infected with HIV and shows mild or severe symptoms of immune system damage.

Transmission: The act of being passed along; in reference to disease, the spread of microorganisms from one person to another or from an animal to a person.

### **Research Hypotheses**

The following are the research hypotheses examined in the study investigating the factors of level of moral development and locus of control with regard to secondary school counselors' HIV-related knowledge and attitudes:

1. Individuals with a higher level of moral development will be more knowledgeable about HIV and will exhibit a more accepting attitude.
2. Individuals who have a lower locus of control will exhibit more knowledge about HIV and will have a more accepting attitude.
3. Counselors who have higher levels of moral development will exhibit lower locus of control.

### **Sample Description and General Data Gathering Procedures**

The target population for the study was secondary school counselors employed in grades 9 through 12 in Virginia. Through the Department of Education, Commonwealth of Virginia, mailing labels for the guidance director of every public high school (286) in the state were obtained. One assessment package was sent to each guidance department

with no specific instructions as to which counselor in the school should complete the information. A total of 118 respondents served as the sample population.

Subjects were asked to complete a questionnaire which included demographics and addressed HIV knowledge and attitudes. In addition, all subjects were asked to complete self-report inventories which assessed levels of moral development and locus of control.

#### **Limitations of the Study**

The study was subject to certain limitations, which must be considered in any interpretation and generalization of results:

1. The volunteer status of the subjects limited broad conclusions and generalizations. As pointed out in a subsequent section, there are certain characteristics common to respondents which may not be true of the general population.
2. The use of only three assessments, which were justified by time constraints, made any conclusions less definitive. Each variable was measured in only one way. If one of the instruments had an undetected flaw, there was no additional test to point out that deficiency.

3. In order to minimize the total time required for completion of all the instruments, the 3-story version, rather than the 6-story version of the Defining Issues Test (DIT) was used. The reliability of the shortened form is discussed in a subsequent chapter.
4. The survey was used with a universe sample of school counselors in the state of Virginia which makes the results infinitely generalizable to the population. Because of the specific residency of all of the subjects, however, there is slightly limited generalization to comparable school counselors in the other states.

## CHAPTER 2

### REVIEW OF LITERATURE

#### Applications of Kohlberg's Theory

The following chapter will explore the literature regarding the application of Kohlberg's theory. Included in this review will be an emphasis on HIV-related knowledge and attitudes, level of moral development, and locus of control.

Kohlberg (1969, 1976) postulates a six-stage sequential typology of moral rules, beginning with punishment-based obedience, evolving through opportunistic self-interest, approval-seeking conformity, respect for authority, contractual legalistic observance, and culminating in principled morality based on standards of justice (Bandura, 1991, p. 47).

DeVries (1991) stated that Kohlberg successfully moved moral development discussions out of the areas of religion and philosophy into the social sciences where it became a legitimate object for scientific study. He went against the popular opinion that morality was simply a matter of customs, norms, values, and attitudes which were culturally relative. Mentkowski (1988) described Kohlberg as a "new kind of educator: a developmental psychologist who expects



research to change the way social institutions do their work, and a teacher who becomes actively involved in the change process" (p. 199).

In reflecting on Kohlberg's work, Nucci (1988) believes "we have yet to adequately account for the relations between structures of moral knowledge and moral action. We have little to say about the relations between moral judgment and affect" (p. 211). Power (1988) suggests that Kohlberg failed to fully address several significant needs:

1. Moral rehabilitation. Although progress was made in Kohlberg's prison projects, no means of restoring or creating a moral sense for those individuals who lacked one was developed.
2. Family intervention. Like Piaget, Kohlberg underestimated the family's role in moral development.
3. Judgment/Action. The relationship of cognition and behavior in morality was only sporadically tackled by Kohlberg.
4. Education. Applying his concepts to moral education consumed much of Kohlberg's career. The work, however, is still in its infancy. Parents implore the schools to help mold their children's character. Society cries for the schools to develop model citizens. Yet the school's influence on moral development is haphazard and trivial.

5. Moral motivation. Over the last two thousand years, various answers have been posed to the question, "Why be moral?", but there has never been a unanimous acceptance. The answer requires that we know more about (a) the nature of morality itself, (b) the moral personality, (c) the role of culture in shaping morality and personality, (d) the relationship of moral psychology and religion, (e) the relationship of values and moral principles, and (f) the basic nature of the human character (p. 183-185).

Several contemporary articles referred to Kohlberg's theory of moral development as it applied to education. Strom and Tennyson (1989) described an instructional model developed to enhance counseling students' capacity and motivation for making judgments that were rational and moral. Counselors make and assist others in making value judgments about what should be done in specific situations. In two senses these judgments are moral: "They concern one's own actions in relation to those of clients and they involve a concern about the values and actions of clients" (p. 34). Professional responsibility requires counselor education curricular to assist students in understanding their presuppositions regarding practice and how their personal values and beliefs impact their reasoning in counseling decisions.

Regarding education, Lickona (1988) posited, "The new moral education must also, to realize its full potential, make a true marriage of Plato and Aristotle. . . From Plato came moral education programs with an emphasis on reasoning; from Aristotle, moral education with an emphasis on practicing right behavior" (p. 192).

The current literature reveals a number of studies employing Kohlberg's moral issues. Power (1988) worked with Kohlberg and Higgins to analyze the moral atmosphere of a group's mutual acceptance of social norms and their sense of community. For four years the community meetings of the Cluster School were studied in a longitudinal analysis. In terms of their institutionalization and stage, the following collective norms developed: trust, attendance, respect for property, caring, participation, and integration. The results of the study were confirmed through "a parallel analysis of individual ethnographic moral atmosphere interviews" (p. 175).

Mosher (1988) discussed a study in which the relationship between moral judgment and moral action was being assessed through the answers to questions regarding how actual moral decisions were made in personal relationships, in private lives, at work, and so on. The subjects were students at the university of California-

Irvine and had been former participants in the Aierra Project. Future plans for the study included retesting and intensive interviews.

Bradley (1985) found a significant increase in the moral development scores of the Defining Issues Test (Rest, 1980) for ex-offenders who participated in a four-month counseling program aimed at moral development facilitation. Weekly intervention included three hours of group counseling during which time moral dilemmas from the Values of Democracy Series filmstrips were viewed and discussed. Individual counseling sessions of one hour were also included.

Bush, Krebs, and Carpendale (1991) conducted a study in which the hypothetical characters in Kohlberg's moral dilemmas were changed to males with AIDS. The study also included the addition of an open-ended question: Does the presence of AIDS in our society raise any issues you would consider moral in nature; if so, please outline the issues focusing on why you would consider them to be moral." The findings from the study indicated that "subjects based their moral judgments about a topical social issue on the same structures they invoked on Kohlberg's test" (p. 150).

An empirical study by Wilmoth and McFarland (1976) compared four measures of moral reasoning. Parallel comparisons were made between Kohlberg's Moral Judgment Scale (1958 and 1969) and the Sexual Moral Judgment Scale

(Gilligan, Kohlberg, Lerner, and Belenky, 1971), an objective form of the MJS (Maitland and Goldman, 1974), and the measure of Maturity of Moral Judgment (Hogan and Dickstein, 1972). The construct of moral reasoning was indexed by all of the instruments. Participating in the study were 81 graduate students with a mean age of 30.45 years. "Similar to the findings of Gilligan, et al. (1971) there was a tendency for the present subjects to think at lower stages on sexual moral dilemmas (SMJS stories) than on the other moral judgment stories (MJS stories)" (Wilmouth and McFarland, 1976, p. 7). The correlation for the SMJS and the MJS was  $r = .66$ . "Contrary to theoretical expectations, the subjects' scores on the objective measure of Kohlberg's stages (OMJS) were not significantly related to their scores on the moral stories ( $F = 1.82$ ,  $df = 4/64$ ,  $p < .15$ )" (Wilmouth and McFarland, 1976, p. 8). Because of low reliability scores, the OMJS was found to be incapable of validly assessing the Kohlberg stages. The Mature Moral Judgment Scale demonstrated a strong relationship to the Kohlberg protocols, implying greater potential for the instrument. "Researchers who do not wish to investigate stage development, but rather the continuous concept of moral maturity, should find Hogan's MMJ convenient for their purposes" (Wilmouth and McFarland, 1976, p. 10).

Not until Lawrence Kohlberg (1969) articulated a synthesis of Mead's (1934) symbolic interactionism and

Piaget's (1932/1965, 1968) genetic epistemology could the developmental significance of counseling as a self-constructive process of social influence be fully recognized. Although Kohlberg's contribution to our understanding of moral development places him among the leading developmental psychologists of this century, counselors are only beginning to appreciate the implications of his work for their own practice (Hayes, 1994, p. 261).

Parr and Ostrovsky (1991) contend that Kohlberg's work on moral development has had an insignificant impact on the literature pertaining to school counseling. The major theories that have affected school counseling, such as Rogers's person-centered theory or Glasser's reality theory, "do not feature developmental issues as important in planning intervention strategies" (p. 14). They note that while there are articles that proclaim the positive relationship between moral development and counseling experience and that argue for a value-centered advocacy model, guidelines have not been provided to enable the school counselor to apply the knowledge on moral development to the school setting and work with children. Kohlberg is credited with authoring more than 100 articles, but only two directly involve conceptualizing counseling as a process (Hayes, 1994).

Strom and Tennyson (1989) assert that "the need to prepare reflective counselors has become critical to a real-world professional practice dominated by practical problems that are complex, unique, troubling, uncertain, and value laden" (p. 41). They stress that practical (moral) judgment is enhanced by the following personal qualities: "the ability to form and use one's own concepts about ethical issues; to search for and understand others' perspectives on ethical issues; to communicate with others about perceptions, values, and beliefs; to test the validity of communication, form alternative perspectives about ethical issues, and engage in the process of practical (moral) reasoning" (37). Hayes (1994) contends that "the years immediately ahead are likely to demonstrate the efficacy of applying Kohlberg's ideas to counseling practice. Counselors who attempt to conceptualize their work from a constructivist perspective may find they understand their clients more fully and perhaps themselves as well" (p. 265).

### **Critique**

While there is an obvious need for school counselors to be aware of the role of moral development in their own lives as well as in the lives of the people with whom they work, a review of the literature reveals that there are few articles available to guide them. "Research on enhancing counselor effectiveness through achieving better matches between the

counselor's choice of intervention and the client's developmental readiness is lacking" (Parr and Ostrovsky, 1991, p. 19).

Mosher (1988) believes "a cognitive developmental psychology of morality for women, minorities, and others excluded from the current normative samples is timely. What of moral education for professionals: lawyers, teachers, MD's. . . The needs are as manifest as the 'markets'" (pp.206-207).

#### **HIV Knowledge and Attitudes**

The American School Counselor Association (ASCA) believes in an active role in HIV/AIDS education in schools and colleges. Holder (1989) contends that:

Counselors must be able to respect all individuals and provide services to anyone, regardless of their own personal prejudices or discomforts they may have. School counselors may be the only resource for some individuals who are concerned or confronted with AIDS. Whether the client is affected directly or indirectly, the counselor needs to be able to provide services to him or her (p. 305).

Previous studies have examined HIV/AIDS-related knowledge and attitudes among doctors, nurses, dentists,



allied health professionals, psychologists, and teachers. The literature regarding school counselors, however, is clearly deficient.

Bernstein, Rabkin, and Wollard (1990) studied 54 dental and 150 medical students attending a large medical school in the Northeast. The areas to be assessed were: (1) anxiety regarding personal and professional risk factors; (2) attitudes toward treating patients with AIDS; (3) concerns about how the prospect of contact with AIDS patients might affect specialty choice and hospital location; and (4) whether the students were interested in working with patients with AIDS. The dental students remained consistently more anxious and more restrictive in their attitudes toward treating patients with AIDS than did their medical student counterparts. Both groups were concerned about contracting AIDS in their professional lives. A substantial minority of students in both groups did not believe they had a responsibility to treat all patients for whom they were trained to treat.

Wu, Adams, and Scherer (1990) used a convenience sample of 408 undergraduate students enrolled in a teacher education program in the western New York area. Usable responses came from 289 females (81%) and 70 males (19%). A significant majority of the subjects were White (96%). The study of teachers was interested in determining whether a relationship existed between type of education (secondary or

elementary) and AIDS knowledge. The future teachers did not meet the criterion of appropriate knowledge about AIDS and were especially weak in the area related to pathology.

St. Lawrence, Kelly, Owen, Hogan, and Wilson (1990) assessed psychologists who were selected from the 1987 edition of the National Register of Health Providers in Psychology. Included in the study were 94 males and 32 females with a mean age of 49.3 years. The question in this study was whether psychologist negatively stigmatize an individual because of a disease (AIDS or leukemia) or because of a sexual preference (homosexual or heterosexual). Results indicated that psychologists evaluated the AIDS patient more negatively and reported less willingness to interact with him in a professional role or in casual social situations.

Allied health students versus non-allied health students were the focus of a study by McDermott, Lillien, and Rosevelt (1990). Demographics, knowledge, beliefs, attitudes, and practice domains were in question. While the allied health students proved to be knowledgeable in many AIDS-related areas, there were clear cognitive deficits and misconceptions.

Holder (1989) talks about a training program for school counselors that covers several areas of HIV/AIDS information: medical facts, general aspects, psychological and counseling aspects, educational aspects, and available

resources. The aim of the workshop is to increase the counselors' HIV/AIDS awareness and to assist them in becoming more comfortable in dealing with the disease. "Unfortunately, AIDS will be around for a long time and counselors and educators need to be prepared to deal with it when necessary. The best preparation is to stay informed and educated" (p. 308).

Russell (1989) discussed the counselors' role in regard to HIV/AIDS education and adolescent issues of homosexuality. School counselors are a source for positive intervention for adolescents who have questions about their sexual feelings. "A critical issue for counselors is that of processing their own feelings about homosexuality. The counselor's attitude is a vital variable in the successful encounter with the adolescent as well as in educating others on these issues" (p. 336). In synthesizing the work of Berger (1986), Russell (1989) notes three requirements for good counselors: to be (a) sufficiently comfortable with one's own sexual feelings so that the client's situation will not be threatening, (b) comfortable in discussing intimate sexual issues, and (c) truly unbiased (p. 336).

In commenting on counseling in the era of AIDS, Dwarkin and Pincu (1993) make the following observation:

No matter what our theoretical orientation happens to be we are called upon to counsel not only with our clients, but also with all of the significant others

affected by this disease. We are thrust, almost on a daily basis, into the medical, social, and political systems that our clients face. This disease forces us to confront our beliefs and attitudes about specific stigmatized populations, sexuality, sexual orientation, health, sickness, quality of life, and death and dying" (p. 280).

Counseling has traditionally been regarded as "value neutral." Involvement in HIV/AIDS education is causing many professionals to examine their articulated and unarticulated values. Agresti (1990) says counselors "have a vital contribution to make and must approach AIDS education with energy and seriousness" (p. 218).

### Critique

Subject selection was a common weakness of the studies reviewed. Sampling restrictions limited the implied population to which the results could be generalized. In both the future teachers study and the allied health study, women were over-represented, which made it difficult to adequately discuss gender differences. A major strength of the studies is that an initial step was taken to better understand a serious disease epidemic--AIDS. Holder (1989) proposes that "unfortunately, AIDS will be around for a long time and counselors and educators need to be prepared to deal with it when necessary. The best preparation is to

stay informed and educated" (p. 308). The literature review supported the critical need for school counselors to be ready, willing, and able to deal with the HIV/AIDS issue.

### Level of Moral Development

While the relationship between moral reasoning and moral behavior is complex and the attainment of higher stages of moral reasoning does not guarantee moral behavior, Rest (1979) points out that the available data suggest that no other single variable is as powerful an influence on moral behavior (Welfel and Lipsitz, 1983, pp. 194-195).

Rest (1986) postulates that when a person is behaving morally, certain psychological processes have occurred.

According to his four-component model:

1. The person must have been able to make some sort of interpretation of the particular situation in terms of what actions were possible; who (including oneself) would be affected by each course of action; and how the interested parties would regard such effects on their welfare.
2. The person must have been able to make a judgment about which course of action was morally right (or fair or just or morally good), thus labeling one possible line of action as what a person ought (morally ought) to do in that situation.

3. The person must give priority to moral values above other personal values such that a decision is made to intend to do what is morally right.
4. The person must have sufficient perseverance, ego strength, and implementation skills to be able to follow through on his/her intention to behave morally, to withstand fatigue and flagging will, and to overcome obstacles (pp. 3-4).

Since ethical behavior is a subset of moral behavior, Van Hoose and Paradise (1979) and Zahner and McDavis (1980) suggest "that Kohlberg's theory of moral development may have particular relevance for understanding counselors' responses to ethically sensitive situations" (Welfel and Lipsitz, 1983, p. 195). A review of literature indicates wide variability in counselors' moral and ethical behavior (Boyd, Tennyson, and Erickson, 1973, 1974; Golden and O'Malley, 1979; Noland, 1969; Nugent, 1969) and suggests that some practitioners lack ethical awareness (Ajzen, 1973; Cramer, Groff and Zani, 1969; Holroyd and Brodsky, 1977; Sanders and Keith-Spiegel, 1980; Weisskopf-Joelson, 1980). Welfel and Lipsitz (1983) further state that "when one turns to the existing empirical literature to understand the causes of unethical behavior, little guidance is found" (pp. 194-195).

Rest (1986) reviewed a number of studies that utilized the Defining Issues Test (DIT). He reported that Blasi

(1980) found 57 of the 75 studies he investigated revealed a significant relationship between moral judgment and behavior. Thoma (1985) compiled a review of approximately 30 studies that related DIT scores and behavioral measures. His conclusion was, "since we observe a consistent pattern of significant relationships between DIT scores and the behavior measures, it seems safe to conclude that generally there is a link between moral judgement and behavior" (p. 135). Getz (1985) "explored the idea that subjects scoring higher on the DIT not only endorse more liberal views with regard to human rights issues, but also that the structure of their thinking is different from more conservative, lower-scoring subjects on the DIT" (p. 142).

The relationship between teachers' levels of moral development and their teaching behaviors has been the focus of a few studies. Johnston (1985, 1986) discovered a positive relationship between teachers' understanding of specific topics such as "on-task" behavior and levels of moral development as indicated by the DIT. The relationship of teachers' moral development levels as they relate to teacher/student roles and classroom rules was studied by Johnston and Lubormdrov (1987). "Teachers with high moral development, as measured by the DIT, had a more democratic view of teacher and student roles in the classroom. . . . researchers argued that from a cognitive developmental perspective, the understandings of teachers with higher DIT

scores were more 'professionally adequate' than those teachers with lower DIT scores because they had the capacity to think more complexly about educational issues" (Rest, 1979, pp. 6-7).

Welfel and Lipsitz (1983) reported on a study that hypothesized that there would be a positive relationship between counselors' level of training and work experience and their stage of moral reasoning. It was further believed that the moral reasoning scores of the counselors would compare favorably to students enrolled in other undergraduate programs. Participants in the study included 63 counselors-in-training at Boston College. The instruments of measure were the General Information Questionnaire and the Defining Issues Test (DIT). Within the boundaries of an exploratory study, the findings were encouraging but suggested the need for further research. "It is possible that students are selected or self-select for additional training in counseling at least partially on the basis of their stage of moral development" (p. 200). Graduate and undergraduate counseling students were equally sophisticated in moral reasoning to students in other majors. However, "comparability to other professions" does not necessarily imply adequacy for the counseling profession (p. 201).

Lampe and Walsh (1992) identified a study that compared the moral decision-making processes and the corresponding



stages of moral development of teacher educators, practicing teachers, and education students. Also studied were the factors that impact the decisions. The "Survey of Educator Ethics Opinions" and the Defining Issues Test were administered to 240 subjects. Empirical data indicated "that educators with more highly developed stage cognition (postconventional thinking) knowingly deviate from ethical decision rules more often than do students with high rule and order orientation. . . educators with higher measures of moral development make more liberal ethical decisions while those with lower measures of moral development make more conservative decisions" (p. 31).

Mohr (1987) investigated the level of adolescent moral reasoning when making decisions regarding social dilemmas "close to home" (e.g., using drugs at a party) as opposed to abstract dilemmas somewhat removed from daily living. Regarding drug-related dilemmas, the study also investigated the similarity of male and female adolescent reasoning. Participants in the study included 33 male and 21 female eighth graders. A modified version of the DIT was the assessment instrument utilized. "The greatest differences in mean percentages of responses to the two types of dilemmas were at Levels 1 and 3. At Level 1 (preconventional) the difference in means was 19.16 percentage points ( $t = 6.82, p < .0005$ ) with the drug dilemmas having the higher percentage. At Level 3

(postconvention) the difference in means was 12.22 percentage points ( $t = 4.14, p < .0005$ ) with the two DIT dilemmas again having the higher percentage. Findings of the study suggest that abstract social dilemmas are considered from a higher stage of moral development than are drug-related dilemmas. Adolescent girls reasoned at a higher stage of moral development than adolescent boys on drug-related dilemmas.

Locke and Tucker (1988) reported on a study where the question was asked: "Does changing the race of the protagonist in the DIT stories affect the moral judgment scores of either Black or White participants?" (p. 233). Volunteer participants included 127 graduate students and 117 undergraduate students. The DIT and a "Revised DIT" were utilized. Racial manipulation did not impact the emotional distance of White participants from the dilemmas, but Black participants' emotional responses became more stressful and intense when there were Black dilemma characters.

Welfel and Lipsitz (1983) summarized a study by Zahner and McDavis (1980) that compared paraprofessionals with community college degrees with professionals with master's degrees on Kohlberg's stages of moral development using the DIT. It was concluded that there is a distinct difference between those who enter paraprofessional training and those

who pursue graduate studies and that moral reasoning is only minimally impacted by graduate training.

### Critique

In regard to professional groups, Rest (1979) contends that almost all attain the conventional level of moral reasoning, but many do not move beyond it. "If this same trend applies for counselors as it does for nurses, lawyers, business executives, and other professional groups, then it is possible that differences in moral reasoning capacities could help explain the inconsistencies in moral and ethical behavior of counselors and the range in counselors' interpretations of the existing codes of ethics" (Welfel and Lipsitz, 1983, p. 195).

". . .much remains to be learned about the specifics of their (counselors') capacity for moral reasoning. . ." reported Welfel and Lipsitz (p. 202). They added that there is an unfortunate lack of published literature available regarding this issue and were able to cite only one study. The impact of moral development on educators' decision-making processes was investigated in a number of studies, but failed to "indicate what the best or preferred strategy is for either education for the students or for the profession" (Lampe and Walsh, 1992, p. 33). According to Rest (1979, 1986), hundreds of studies involving thousands of subjects have been conducted, but each DIT study

indicates the need for more studies. Welfel and Lipsitz (1983) postulate that "the goals of the (counseling) profession ought to be that of first understanding the possible relationship between moral reasoning and ethical practice and of secondly fostering increased ability to make mature moral judgments" (p. 201). Perhaps the goals of future research and literature should be the same.

### **Locus of Control**

"Given that counseling involves the cognitive exercise of communication-sharing between individuals holding specified and agreed social roles in which the perceived causes of experiences and behaviors are discussed between participants, it seems that Rotter's (1966) notion of locus of control may provide one useful theoretical construct for the investigation of counseling expectations and outcome" (Foon, 1986, p. 462). Studies of counselors' and clients' cognitive characteristics have resulted in conflicting results with some researchers finding significant associations and others seeing no relationship. Foon (1986) reports on a study examining the effect of locus of control on counseling expectations of clients. Participants included 67 volunteer clients drawn from health centers in Canberra, Australia. Subjects viewed a series of videotaped role-plays and were asked to estimate their probable success with each of the therapists presented. Locus of control,

sex, and social class of the therapist were included in each role-play. The findings supported the claim that matching clients' and counselors' locus of control results in favorable counseling expectations. Greater success with internal therapists was anticipated by internal clients, while greater success with external therapists was expected by external clients.

Fry (1975) conducted research to examine the interaction between locus of control, level of inquiry, and subject control in counseling. Participating in the study were 112 college-bound high school graduates. The conclusions follow:

Extrapolating from the results of the analogue study, we may reasonably assume that if a client is low internal and high inquiry he would gain more from interacting with a counselor who directs and firmly controls the counseling treatment, in which the client's low internality is not a handicap and the prevailing structure imposed by the counselor does not seem to inhibit the high inquiry on the subject. On the other hand, clients who are high internals and have high inquisitiveness would derive considerable gains from any one of the counseling treatments. They would probably make the greatest gains by being put in charge of their own learning and pursuing self-

direction and self-control. The absence of the counselor would not be a loss in their progress (p. 286).

Several studies have noted that working with handicapped campers can have a permanent positive effect on counselors. At Camp ASCCA (Alabama's Special Camp for Children and Adults) research on counselors was conducted for two years. The Coopersmith Self-Esteem Inventory (Adult Form), Rotter Locus of Control Scale, and Lazar Attitude Toward Handicapped Individuals Scale were used to test 32 male and female subjects the first year and 38 subjects the second year. A pre-test, mid-test, post-test, and follow-up test were administered. "Locus of control became more internal throughout the first three testings during both years. It then leveled with little change during the follow-up testing period. Locus of control scores change initially and then become level and more stable" (Ruzicka, 1987, pp. 28-29).

Butcher and Herbert (1985) discussed a qualitative study of similar and dissimilar counseling pairs matched on the locus of control variable. Participants included two male undergraduates who were seeking counseling at a university counseling center. While limited in causation inference, the single case study produced multiple hypotheses about the effectiveness:

Hypothesis 1: Locus of control expectancy may affect the establishment of counseling rapport, with similarity a positive indicator and dissimilar I-E expectancy a negative indicator in this task. The study revealed that the dissimilar pair evaluated the counselor's interventions as only slightly effective and often neutral or detrimental. The similar pair experienced an immediate warmth and observed a relationship of trust and optimism. In summarizing the work of Lefcourt (1982), Butcher and Herbert (1985) relay that "findings suggest that extreme scores at either end of the I-E continuum are problematic for therapy, with extreme internals exhibiting defensiveness or repression and extreme externals presenting severe pathology" (p. 103).

Hypothesis 2: Locus of control, as measured by the Rotter I-E Scale, seems susceptible to situational variables rather than to a stable assessment of generalized expectancy as reported by Rotter (1966). ". . .the discrepancy between these posttreatment I-E Scale scores and trends revealed in the time-series analysis of this variable over treatment challenge the premise of the I-E Scale that locus of control is a stable (trait) personality variable, implying instead that it is a situationally determined (state) factor" (p. 107).

Hypothesis 3: Counselor effectiveness seems to be case-related, with matching on I-E expectancy a relevant factor in this variability. "This study clearly supported other empirical evidence that counselor effectiveness is case related" (p. 107).

Chronic manpower shortages in the mental health profession are being alleviated by lay counselors who receive a short-term training program. Martin and Shepel (1973) reported on a study that "hypothesized that structured training would cause an increase in the ability to discriminate helpful counseling conditions and a shift toward the internality dimension of locus of control with associated increase in trust, insight, and self-confidence" (p. 741). Before and after their 18-hour training program, female nurses completed the I-E Scale and the Discrimination Index. The results indicated a significant increase in counseling awareness and a shift toward internality on the I-E scale where the initial mean of 35.67 was reduced to a final mean of 30.95 ( $t = 4.40$ ,  $df = 20$ ,  $p < .001$ ).

Donnan and Pipes (1985) investigated thirty-seven counselor education students' views of the generic causes of behavior. Judgments were made by the participants in reference to either their own behavior or someone else's. The subjects assigned high ratings to external causes when



explaining their own behavior; high ratings to internal causes were assigned when explaining the behavior of others.

### Critique

The review of literature generally supports locus of control as a useful construct for studying the relationship between counseling expectations and outcome. While many of the studies are limited in causation inference, they do suggest that an effective match between counselor and client locus of control can enhance therapeutic gains. Whether locus of control is a stable personality variable or a situationally determined factor was not determined by the literature review.

### Relationship of the Literature to the Study

The preceding sections of this chapter have considered analyses, investigations, and commentaries on the theoretical base and on the variables of the study. Certain inferences may be made from the available literature:

1. Interest in the levels of moral development is significant. Standard listings of books and journal articles contain extensive citations.
2. The percentage of adolescents contracting the HIV virus widely believed to cause AIDS is growing; by implication, there will be a significant need for

secondary school counselors to examine their feelings about HIV/AIDS. The literature in this area is critically limited.

3. The primary focus of the HIV-related knowledge and attitude questionnaires has been on professionals in the health-related areas.
4. None of the surveyed literature has dealt with secondary school counselors' HIV-related knowledge and attitudes as it relates to level of moral development and locus of control. It appears that this is a challenging field for investigation.

## CHAPTER 3

### COLLECTION OF DATA

The methodology for the study will be the focus of this chapter. It includes a description of the sample population, the data gathering procedures and the research design. The research hypotheses will be noted and the instrumentation and statistical analyses employed will be described. Finally, the ethical considerations will be indicated.

#### Sample Population

For the study, the sample population was selected from secondary school counselors employed in the state of Virginia. Information provided by the Department of Education, Commonwealth of Virginia, indicates that all of the counselors work exclusively with grades nine through twelve in a public school setting. Each high school guidance department in Virginia was sent an assessment packet. Out of 286 departments, 118 responded, for a return rate of 40.4%. According to Gay (1987), a sample of 10% of the population is considered minimum for descriptive research.

The study subjects were volunteers. In synthesizing Rosenthal and Rosnow's earlier work, Monet, Sullivan, and DeJong (1986) cite certain tendencies of volunteer subjects. Better education, higher social class, higher intelligence, greater need for social approval, and more sociable (p. 290) are factors that could affect a subject's responses. Gay (1987) points out that volunteers may differ from non-volunteers in that they are more motivated or more interested in the specific study (p. 116).

#### **Data Gathering**

Data gathering was preceded by a limited pilot study in which a small number of secondary school counselors completed all parts of the assessment packet. These subjects were asked to comment on length of time required, clarity of instructions, and degree of difficulty in working with the materials. Also solicited were any subjective reactions to the assessment content. This feedback was used by the investigator in the study itself.

Prior to the assessment, the researcher conferred with the Director of Secondary Counseling, Virginia Department of Education, for suggestions regarding the recruitment of subjects. It was through this office that mailing labels for the guidance department of every public high school (286) in Virginia were made available to the investigator. An assessment packet containing a cover letter, a

questionnaire, the Defining Issues Test (Rest, 1979), the Rotter Internal-External Locus of Control Scale, a neon-colored pencil with the slogan, "Counselors Can Make a Difference," and a stamped, self-addressed envelope. Two weeks later, a postcard was sent to subjects reminding them to return the questionnaires or thanking them if they had already done so (Appendix C). The following points were among those emphasized and listed in the cover letter (Appendix A):

1. The study sought to investigate the relationship between the scores on the Defining Issues Test (DIT) and Rotter's Internal-External Locus of Control Scale with the scores on the HIV Related Knowledge and Attitude Survey.
2. The focus of the study would be on group data.
3. The questionnaire and assessments would be coded and no names would be requested on the packet.
4. The subjects would participate on a voluntary basis.
5. The investigator would be available by mail or by phone to address any concerns or questions.

### **Instrumentation**

#### **AIDS-Related Questionnaire**

The assessment packet contained three elements in addition to the cover letter and a stamped reply envelope. An HIV-related questionnaire (Appendix B) collected

demographic data and assessed the knowledge, beliefs, attitudes, and practice habits of secondary school counselors. It was patterned after the Healthcare Providers' AIDS survey produced by the Survey Research Laboratory at Virginia Commonwealth University. The original instrument and updates of it have been used repeatedly over the years. It has been included in grants by the HIV Consortium and the Virginia Department of Health. While no formal studies of validity and reliability have been conducted, it has been reviewed for content validity by AIDS workers on numerous occasions. Acceptance by the HIV Consortium and workers in the area speak to the instrument's validity issue.

#### **Defining Issues Test**

Two instruments were utilized for the study. The first was the 3-story version of the Defining Issues Test (Rest, 1979). Fashioned after Kohlberg's typology of six basic moral orientations, "it has the most extensive data base yet collected on a measure of moral judgment, and no other measure of moral judgment has demonstrated such repeatedly high reliability and validity" (Rest, 1979, p. 2). More than 35,000 questionnaires are processed annually. The meaningful results produced by 500 studies utilizing the DIT indicates that it is a useful measure of moral judgment. Lamps and Walsh (1992) report that the DIT is consistent

with stage-sequence theory and provides a reliable assessment of Kohlberg's stages of moral development.

A paper and pencil adaptation of the Kohlberg Moral Maturity Test, the DIT is based on the fact that people view different considerations as relevant when trying to make a moral decision about a social problem. A multiple-choice test, the 6-story form of the DIT takes approximately 35 to 40 minutes to complete. The 3-story form takes approximately 25 to 30 minutes. In the researcher's experience, however, the 3-story form was done in 10 to 20 minutes. Subjects who are responding at random or who do not understand directions can be detected by an internal consistency check within the questionnaire.

When comparing the 3-story form of the DIT with the 6-story form, various tests of reliability may be used. Test-retest reliability, as measured by the authors, indicates that for the major scales (P and D), the 3-story form is almost as reliable as the 6-story form. Table 1 summarizes the authors' research.

Table 3-1

<u>6-STORY</u>		
Score	Sample A	Sample B
P	.82	.76
D	.87	.76
<u>3-STORY</u>		
Score	Sample A	Sample B
P	.77	.65
D	.83	.71

Test-retest reliability is less strong for the 3-story version on the stage scores, but it was not the intent of this study to use the stage scores.

Internal reliability as measured by Chronbach's Alpha for the 3-story version compares quite favorably to the 6-story form. Table 3-2 shows the Alpha scores for the two forms.



Table 3-2

ALPHA SCORES

Score	6-Story	3-Story
P	.77	.76
D	.79	.71

Criterion group validity refers to the concept of different groups having different moral concept levels, depending on the nature of the group. An exaggerated example would be a group of ministers compared to a group of prison inmates. Actually, the authors of the DIT compared Ph.D.s in Moral Philosophy and Political Science with ninth graders. They assumed that the moral development scores of the Ph.D.s would be higher and, in fact, they were statistically significant in that direction.

Longitudinal validity refers to the phenomenon whereby a person who takes a test over a series of months or years shows increases on the scores of that test which can be attributed to changes in life experiences or education. Using control groups who have not had the life experiences, the authors of the DIT demonstrated greater increases in scores for those that had (the educational experience) than those that had not.

Discriminant validity is based upon the use of partial correlations to calculate the "unique" statistical contribution of the DIT score as a correlation variable. It should cluster (correlate) with other scores of moral reasoning, just like IQ scores generated by different tests should cluster with each other, or political attitude scores should cluster with other political attitude scores. The authors report significant explanatory contributions of the DIT scores. This concept is similar to, and an extension of, convergent validity.

According to Rest (1979), advantages of the DIT include its standardization, its ease of administering, its minimal dependence on verbal expressiveness, and its objective scoring. The disadvantages "are the possibility of the subjects' filling out the test in random fashion, the problem of misinterpreting the items or projecting their own thinking idiosyncratically onto stage-prototypic statements, and the problem of selecting items on the basis of irrelevant cues, such as the apparent complexity of an item or its lofty language" (p. 256). To counter these potential problems, Rest varied the number of items at each stage; used short items for which a course of action was not advocated; varied the number of items at each stage; and constructed the "Consistency Check" and the meaningless ("M") items which is a guard against items selected for their pretentiousness rather than their meaning.

Scores for Kohlberg's stages 2, 3, 4, 4 1/2, 5A, 5B, and 6 are produced by the DIT. The usefulness of each subject's information is verified through the two internal reliability indices. The "P score," a combination of stages 5 and 6, is the most used index of the DIT and represents the importance a subject assigns to "Principled" moral considerations when making a moral decision. The "Utilizer" score ("U score") reveals the extent at which a subject is utilizing the concepts of justice when making the "right" moral choice. According to the author, the predictability of moral behavior by the DIT has doubled through the use of the "U score" as a mediator variable.

From research on the DIT, Rest (1979) makes the following observations:

1. Moral judgment is not "fixed" in early childhood.
2. Formal education is highly associated with development in moral judgment.
3. Development in moral judgment can be effectively promoted by moral education programs.
4. The pathway of social development that a person is likely to take can be predicted by the moral judgment scores in senior high school. Neither further education nor personal development tend to be sought by low scorers. They experience less career fulfillment and less community involvement. High scorers pursue higher education and personal

development. They are more fulfilled in their careers and more involved in their communities.

5. No evidence of sex bias exists in the DIT. Differences between females and males are minimal, accounting for less than one half of one percent of the variance in moral judgment scores.
6. In more than twenty countries, cross-cultural studies show more similarities than differences with U. S. samples.
7. Consistent and significant levels of moral judgment (as measured by the DIT) are related to indices of behavior and a wide range of attitudes.

Correlations of the DIT with the Marlowe-Crowne Social Desirability Scale (1994) resulted in a range from  $-.07$  to  $-.35$ . In reporting on the relationship of moral reasoning of counselors to level of training and counseling experience, Welfel and Lipsitz (1983) utilized the DIT and reported results that were highly supportive of its construct validity. Hult (1979) used the DIT to examine the relationship between ego identity status and moral reasoning in university women. Tsujimoto (1982) conducted a study to examine "whether Rest's" (1979) objective test of moral comprehension could yield comprehension stage data that form a Guttman scale. If so, the test's construct validity and its usefulness for certain research purposes would be enhanced" (p. 550). The results indicated that a Guttman

scale is formed from the comprehension stage data. In investigating the cognitive and political attitude correlates of the DIT, Carroll (1977, p. 1) noted the following:

The Defining Issues Test (DIT) has been subjected to construct validation in a number of studies relating it to the development of moral judgement and to measures of cognitive development and political attitudes. The DIT has been found to have significant positive correlations with the Comprehension of Social-Moral Concepts Test for a variety of samples of students and adults. A longitudinal study showed scores on both tests increased over time. A number of studies also showed significant positive correlations of the DIT with Kohlberg's Moral Judgement Scale under several different scoring methods . . . The DIT also has positive correlations with other measures of cognitive development. Negative correlations were found between the DIT and authoritarian attitudes as indicated by the Law and Order Test. Correlations of the DIT with other measures of political attitudes are generally lower and inconsistent.

Murk and Addleman (1992) report that there has been an increased amount of research on moral reasoning because of the DIT. The result is that a number of variables have now been linked to moral reasoning, political affiliation and

orientation, age, education, religiosity, cognitive measures, and gender (p. 467). Rest (1979) postulates "that moral judgment is an important factor in real-life decision making, but that the interaction with other factors complicates the relationship so that simple linear correlations cannot be expected" (p. 60).

Lampe and Walsh (1992) employed the DIT when studying the moral decision-making processes and the corresponding stages of moral development of education students, practicing teachers, and teacher educators. "The empirical data collected clearly indicate that educators with more highly developed stage cognition (post-conventional thinking) knowingly deviate from ethical decision rules more often than do students with high rule and order orientation" (p. 28).

#### **Rotter's Internal-External Locus of Control Scale**

Rotter's Internal-External Locus of Control Scale, or I-E (Rotter, 1966) is a forced-choice, self-administered instrument utilizing 23 question pairs plus six items for fillers which are not included in the scoring. Ranging from zero to 23, a low score represents internal, and a high score represents external locus of control. Approximately fifteen minutes is required for completion of the scale. "LOC represents an individual's belief that they or the 'environment' control events. Individuals who hold high

expectancies regarding their ability to control events have an 'internal' LOC; whereas, individuals who hold low expectancies regarding their control over events have an 'external' LOC" (Renn and Vandenberg, p. 1162). For the externally oriented person, the outcome of a situation is controlled by a powerful being, fate, or chance (Mark and Addleman, 1992).

Normed on 200 male college students and 200 female college students, an internal consistency analysis (Kuder-Richardson) yielded  $r = .70$  for each gender. Test-retest reliability coefficients calculated for two of the population subgroups ranged from .49 to .83. Rotter (1966) also reported a correlation range from .55 to .61 with other instruments.

Rotter (1966) reports that several factor analyses support the I-E Scale's assumption of uni-dimensionality, and that its construct validity is evidenced by numerous laboratory and survey studies. A multitude of related scales for special populations and purposes have been developed from the original scale.

Murk and Addleman (1992) conducted a study to examine the relationships among moral reasoning as defined by the DIT, locus of control as defined by the I-E Scale, and demographic variables. Participants included 205 undergraduate students from three universities. One question to be answered by the investigation was whether

moral reasoning and locus of control for an individual were related. While several studies of positive correlations between locus of control and other variables such as academic achievement were cited, Murk and Addleman (1992) concluded that a negative relationship existed between a subject's moral reasoning and locus of control.

Johnson, Nora, and Bustos (1992) used the I-E Scale to predict compulsive gambler's incidence of relapse. I-E scores and relapse were also correlated with the variables of age, marital status, type of work, education, religious background, and childhood physical abuse. The relationship between I-E scores and the extent of relapse-free periods resulted in an almost-zero correlation. The relationship between I-E scores and marital status, type of work, education, and childhood physical abuse were nonsignificant. In regard to religious background, higher mean I-E scores were reported for Catholic and Protestant relapsers than for their non-relapsing peers.

### **Research Design**

The research utilized a correlational design on several hierarchal levels. Each item was correlated with every other item both within and across instruments. Furthermore, scores were calculated on the subscale level for the DIT and the HIV questionnaire. Each subscale was correlated with every other subscale in addition to the individual items.



A third level of analysis was the correlation of the DIT, the I-E scale, and the HIV survey with the subscales and the individual items. In addition, all of these variables were considered in combination with the demographic factors.

Borg and Gall (1983) suggest one limitation of correlational studies is that they cannot establish cause-and-effect relationships between the variables correlated. If a positive correlation between two variables is found, then other causal inferences which are just as likely can be found. A second limitation of this kind of research is that when a relationship between two variables is discovered, it may be due to an "artifact." The relationship may be attributed to a similarity of scales between instruments, as opposed to the personality factors being similar.

### **Specific Research Hypotheses**

The following section will include the research hypotheses evaluated in the study regarding counselors' attitudes and knowledge about HIV and their level of moral development.

1. There will be a significant positive correlation between the level of moral development as measured by the Defining Issues Test and the counselors' knowledge about HIV as measured by the questionnaire. There will be a significant negative relationship between the counselors' level of moral development and HIV attitudes.

2. There will be a significant positive correlation between the locus of control as measured by the Rotter Locus of Control Scale and the counselors' attitude about HIV as measured by the questionnaire. There will also be a significant negative relationship between locus of control and counselors' HIV knowledge.
3. There will be a significant negative correlation between counselors' moral level of development as measured by the Defining Issues Test and locus of control as measured by the Rotter Locus of Control Scale. The higher the level of moral development, the lower the level of locus of control (internal).

Also, exploratory data analysis were conducted to determine relationships existing in the data which may not be covered in the specific hypotheses.

### **Data Analysis**

The product-moment correlation coefficient was used in the study to test the primary hypotheses. Frequency distributions were generated for response and demographic variables for descriptive and comparative purposes. The resulting data have been used to expose the hypothesis test results and suggest future areas for research. The ultimate goal of the study was to explicate practical applications of the findings.

### Ethical Considerations

With research comes possible ethical implications. In terms of the treatment of the subjects, an effort was made to insure that the study was designed to respond to possible concerns.

1. The subject's confidentiality will be protected.  
This was insured by asking the subjects to furnish the information anonymously. Not even the researcher knew the identity of the respondents.
2. The subject will have the freedom to withdraw or decline participation. In this study, participation was voluntary. Subjects could decline involvement. Completion of the assessment packet could be halted at the subject's discretion.
3. Subjects will have adequate information about the research in which they are involved. A cover letter explaining the study in detail was included in the assessment packet.
4. Subjects will have a chance to debrief after completing the questionnaire and the assessment instruments. In the study, this was accomplished by providing the participants with the address and

phone number of the researcher who was available to address concerns (Rudestam and Newton, 1992, pp. 196-202).

5. Before conducting the study, permission was obtained from the School of Education's Human Subjects Research Committee.

## CHAPTER 4

### Presentation of Data

#### Demographic Information

A total of 118 secondary school counselors voluntarily returned the assessment packets. The participants ranged in age from 27 to 68 with a mean age of 48.78. Table 4-1 presents a summary of the subjects' ages.

Table 4-1

AGE		
<u>Age</u>	<u>Subjects</u>	<u>Percent</u>
26-30	3	2.5
31-36	4	3.4
37-40	7	5.9
41-45	24	20.3
46-50	37	31.4
51-55	18	15.3
56-60	17	14.4
61-65	7	5.9
66-70	1	0.8

N = 118

Table 4-2 shows the gender for the subjects who reported it (n = 117). Female respondents represented 69.2%; male respondents represented 30.8%.

Table 4-2

GENDER		
<u>Gender</u>	<u>Subjects</u>	<u>Percent</u>
Female	81	69.2
Male	36	30.8
N = 117		

In terms of marital status (Table 4-3), eight subjects (6.8%) were divorced; six (5.1%) were widowed; two were separated (1.6%); and eleven (9.3%) were single. Ninety of the respondents were married; they represented 76.3%. One respondent (0.8%) was partnered.

Table 4-3

MARITAL STATUS		
<u>Marital Status</u>	<u>Subjects</u>	<u>Percent</u>
Divorced	8	6.8
Married	90	76.3
Partnered	1	0.8
Single	11	9.3
Separated	2	1.7
Widowed	6	5.1
N = 118		

As noted in Table 4-4, Whites accounted for 84.7% of the responses. African-Americans were responsible for 15.3% of the returns. Most noteworthy is the fact that only two ethnic groups were represented.

Table 4-4

ETHNICITY		
<u>Ethnic Origin</u>	<u>Subjects</u>	<u>Percent</u>
White	100	84.7
African-American	18	15.3

N = 118

In regard to religious preference, the largest number of subjects who reported it (n=83) were Baptist (26.5%). Methodist followed at 15.7% and Protestants at 14.5%. Table 4-5 emphasizes the religious diversity of the results.

Table 4-5

<b>RELIGION</b>		
<u>Religion</u>	<u>Subjects</u>	<u>Percent</u>
Baptist	22	26.5
Brethren	1	1.2
Catholic	9	10.8
Church of Christ	1	1.2
Christian	3	3.6
Disciple of Christ	1	1.2
Episcopal	11	13.2
Hebrew	1	1.2
Lutheran	1	1.2
Methodist	13	15.7
Presbyterian	7	8.4
Protestant	12	14.5
Quaker	1	1.2

N = 83

The region of Virginia from which the responses came is represented in Table 4-6. Appendix D defines the localities that constitute a region.



Table 4-6

REGION OF VIRGINIA		
<u>Region</u>	<u>Subjects</u>	<u>Percent</u>
Central	34	28.8
Eastern	22	18.6
Northern	23	19.5
Northwest	4	3.4
Southwest	35	29.7
N = 118		

The school counseling experience of subjects ranged from one to thirty-five years (n=117). The mean for the group was 14.98 years. Table 4-7 provides data regarding counseling experience.

Table 4-7

SCHOOL COUNSELING EXPERIENCE		
<u>Years</u>	<u>Subjects</u>	<u>Percent</u>
1 - 5	24	20.5
6 - 10	14	12.0
11 - 15	20	12.8
16 - 20	37	31.6
21 - 25	14	15.4
26 - 30	7	6.8
31 - 35	1	0.9
N = 117		

For those counselors who reported it (n = 96), the number of HIV-infected students with whom they had worked ranged from zero to ten (Table 4-8). Twenty-two additional subjects responded that they were unaware of working with any HIV-infected students. They were counted as missing values, not zeros.

Table 4-8

**NUMBER OF HIV-INFECTED STUDENTS  
WITH WHOM COUNSELORS HAVE WORKED**

<u>Number of HIV Students</u>	<u>Number of Subjects</u>	<u>Percent</u>
0	74	77.1
1	10	10.4
2	8	8.3
3	1	1.0
4	2	2.1
10	1	1.0
N = 96		

**Principle Criterion Variables**

The main criterion variables in the study--HIV knowledge, HIV attitude, DIT scores, and Rotter scores--are examined in Tables 4-9, 4-10, 4-11, and 4-12.

For HIV knowledge scores (n=118) the mean is 59.94 and the median is 59.40. For the HIV attitude variable (n=118), the mean is 39.72 and the median is 38.90. As expected, a

significant negative correlation ( $-.30387$ ;  $p=.0008$ ) existed between knowledge and attitude indicating that the more informed counselors were also more tolerant regarding HIV issues. In regard to the P score of the DIT ( $n=89$ ) the mean is 38.41 and the median is 36.85. The Rotter scores ( $n=115$ ) have a mean of 7.65 and a median of 6.65.

Table 4-9

**HIV KNOWLEDGE**

<u>Knowledge</u>	<u>Frequency</u>	<u>Percent</u>
45 - 50	5	4.2
51 - 55	17	14.4
56 - 60	42	35.6
61 - 65	37	31.4
66 - 70	17	14.4
N = 118		

The following HIV Knowledge question was asked on the survey, but the results could not be incorporated into the quantitative analysis:

What would you consider to be the most reliable source(s) of HIV/AIDS information for you?

Professional Journals	75
In-Service Training	94
Health Department	101
Newsletter/Bulletin	40
Mental Health Department	53
Adolescent with HIV/AIDS	33
Other	5

Table 4-10

## HIV ATTITUDES

<u>Attitude</u>	<u>Frequency</u>	<u>Percent</u>
16-20	1	0.8
21-25	1	0.8
26-30	10	8.5
31-35	29	24.6
36-40	26	22.0
41-45	19	16.1
46-50	21	17.8
51-55	6	5.1
56-60	5	4.2

N = 118

On the HIV questionnaire, the following Attitude question was asked, but the responses could not be included in the quantitative analysis:

If an HIV-infected student enrolls in your school, who should be informed?

Counselor	103
Principal	101
Teachers of infected student	71
All teachers in the school	27
Students in classroom of infected student	15
All students in school	10
Parents in the school community	9
School nurse	101
No one	6
Other	6

Table 4-11

DIT SCORES

<u>P Scores</u>	<u>Frequency</u>	<u>Percent</u>
1 - 10	7	7.9
11 - 20	9	10.1
21 - 30	13	14.6
31 - 40	18	20.2
41 - 50	25	28.1
51 - 60	10	11.2
61 - 70	5	5.6
71 - 80	2	2.2
N = 89		

There is a hierarchial integration to Kohlberg's levels of moral development. While change is gradual, and

invariant sequence is formed by the stages with movement always forward to the next higher stage. Carroll (1977) notes that longitudinal studies comparing the comprehension of Social-Moral Concepts Test and the DIT both showed increased scores every time. In his Guide for the DIT, Rest (1987) reports that several longitudinal studies revealed upward trends for both the P score and the D score. He further contends that: Davison, et al, used scaling techniques derived from unfolding models of multidimensional scaling and latent trait theory to scale the DIT items. He found an order in the scale values of the items. When the items are grouped according to their theoretical stages, the averages of these groups are ordered from 2, 3, 4, 5 and 6-- in other words, the empirical values correspond to the theoretical sequence (p. 29).

Table 4-12

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**ROTTER SCORES**

<u>Rotter</u>	<u>Frequency</u>	<u>Percent</u>
1	1	0.9
2	4	3.5
3	11	9.6
4	10	8.7
5	10	8.7
6	15	13.0
7	9	7.8
8	9	7.8
9	12	10.4
10	12	5.2
11	7	6.1
12	7	6.1
13	6	5.2
14	4	3.5
15	4	3.5
N = 115		

---

**Comparison of Study Subjects with Normative Data**

A comparison of the study group to normative data appears in Table 4-13. The bracketed figures are obtained from the Guide for the DIT (Rest, 1983, p. 20) and from a

study conducted with psychology students at Ohio State University (Rotter, 1966, p. 15).

Table 4-13

COMPARISON OF STUDY SUBJECTS WITH NORMATIVE DATA				
	<u>Source</u>	<u>Cases</u>	<u>Mean</u>	<u>Std. Dev.</u>
DIT-(P score)	Study	89	38.41	17.09
	Normative	[1080]	[34.77]	[16.67]
	Group			
Rotter	Study	115	7.65	3.6
	Normative	[1180]	[8.29]	[3.97]
	Group			

#### Relationship of Data to the Research Hypotheses

The research hypotheses were tested with a Pearson's product-moment correlation (2-tailed significance). The results appear in Tables 4-14, 4-15, and 4-16. The standard significance level of  $p < .05$  was used to assess these correlation coefficients.



1. There will be a significant positive relationship between the level of moral development as measured by the Defining Issues Test and the counselors' HIV knowledge as measured by the questionnaire. There will be a significant negative relationship between the counselors' level of moral development and HIV attitudes. The correlation between level of moral development and knowledge was not statistically significant (.19857;  $p=.0621$ ). The negative correlation of moral development and attitude was significant ( $-.23870$ ;  $p=.0243$ ). The study data partially supported the first hypothesis.
2. There will be a significant positive relationship between the locus of control as measured by the Rotter Locus of Control Scale and the counselors' HIV attitudes as measured by the questionnaire. There will also be a significant negative relationship between locus of control and counselors' HIV knowledge. The correlation between locus of control and attitude was positive but not significant (.1409;  $p=.1329$ ). The inverse correlation between locus of control and knowledge was significant ( $-.35039$ ;  $p=.0001$ ). The study data partially supported the second hypothesis.
3. There will be a significant negative correlation between counselors' moral level of development as measured by the Definitive Issues Test. The higher the level of moral development, the lower the level of

locus of control (internal) and vice versa. The level of moral development presented a significant inverse correlation ( $-.27673$ ;  $p=.0087$ ) with locus of control as measured by the Locus of Control Scale. The study data supported the third hypothesis.

Table 4-14

## CORRELATION COEFFICIENTS (2-TAILED SIGNIFICANCE)

	<u>Level of Moral Development (p)</u>
Attitude	$-.2387$ $p=.0243$
Knowledge	$.19857$ $p=.0621$

Table 4-15

## CORRELATION COEFFICIENTS (2-TAILED SIGNIFICANCE)

	<u>Locus of Control</u>
Attitude	$.1409$ $p=.1329$
Knowledge	$-.35039$ $p=.0001$

Table 4-16

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**CORRELATION COEFFICIENTS (2-TAILED SIGNIFICANCE)**

	<u>Level of Moral Development</u>
Locus of Control	-.27673 p=.0087

---

**Information from Additional Exploratory Data**
Years of Counseling Experience Correlations.

A positive correlation was noted between number of years of counseling experience and age (.66947;  $p=.0001$ ); experience and stage 4 of the DIT which focuses on maintaining the existing legal system, existing roles and formal organizational structure (.27298;  $p=.0101$ ); and experience and gender (.30759;  $p=.0008$ ). A negative correlation was found between years of experience and stage 5A of the DIT which focuses on consensus producing procedures, due process and protecting minimal basic rights (-.34162;  $p=.0011$ ) and between experience and the P score of the DIT which serves as an index of moral judgment development (-.29260;  $p=.0057$ ).

Age Correlations.

The demographic variable of age correlated positively with the A (anti-establishment) score of the DIT (.20889;  $p=.0495$ ) and with the gender variable (.19883;  $p=.0316$ ). A negative relationship existed between age and stage 5A of

the DIT which supports abiding by the will of the people, giving everyone his day in court, and safeguarding basic rights ( $-.24527$ ;  $p=.0205$ ).

#### Ethnicity Correlations.

As a demographic variable, ethnicity correlated positively with stage 5A of the DIT which supports the will of the people ( $.23746$ ;  $p=.0254$ ) and with stage 5B which focuses on intuitively appealing ideals ( $.23746$ ;  $p=.0250$ ). A relationship also existed between ethnicity and the P score of the DIT representing the index of moral judgment development ( $.23936$ ;  $p=.0239$ ) and with the D scale which is a composite score on the DIT ( $.24577$ ;  $p=.0403$ ). A negative correlation was presented between ethnicity and marital status ( $-.25908$ ;  $p=.0046$ ).

#### Knowledge Correlations.

The Knowledge score from the HIV questionnaire displayed a positive correlation with the ethnicity variable ( $.18318$ ;  $p=.0471$ ). A relationship also existed between knowledge and stage 5A of the DIT which supports the will of the people ( $.22089$ ;  $p=.0375$ ).

#### Gender Correlations.

The gender variable from the HIV questionnaire was positively correlated with stage 3 of the DIT which focuses on maintaining approval ( $.27249$ ;  $p=.0102$ ). A negative

correlation existed between gender and the P score of the DIT which represents an index of moral judgment development (-.27104;  $p=.0106$ ) and between gender and stage 5A of the DIT which focuses on the will of the people (-.31189;  $p=.0031$ ).

Number of HIV-Infected Students Counseled Correlation.

A negative correlation existed between the number of HIV-infected students counseled and the marital status of the subject responding (-.25018;  $p=.0141$ ). Those counselors who reported working with HIV-infected students were less likely to be married.

DIT Stage Score Correlations.

A cross-analysis of the stage scores of the DIT revealed a number of significant correlations (Table 4-17). Each stage is described in detail in Appendix E.

Table 4-17

## CORRELATIONS BETWEEN SUBSCORES OF DIT

	<u>Stage Scores</u>									
	2	3	4	5A	5B	6	A	D	M	P
2										
3										
4	-.34300 p=.0010				-.42453 p=.0001				-.24128 p=.0227	
5A	-.21281 p=.0453	-.31627 p=.0001					-.27889 p=.0081			
5B										
6	-.37659 p=.0003	-.44638 p=.0001					-.29529 p=.0050		-.20982 p=.0484	
A										
D										
M										
P	-.35457 p=.0007	-.45670 p=.0001	-.47720 p=.0001	.85101 p=.0001	.48473 p=.0001	.54385 p=.0001			.5060 p=.0001	

Stage 4 Correlations.

Stage 4 of the DIT focuses on maintaining existing legal systems, existing roles, and formal organizational structures. A negative correlation existed between stage 4 and stage 3 (-.34300; p=.0010); between stage 4 and stage 5B (-.42453; p=.0001); and between stage 4 and the M score (-.24128; p=.0227).

Stage 5A Correlations.

Stage 5A of the DIT proclaims that organizing a society

means abiding by the will of the people, giving everyone his day in court, and safeguarding basic rights. Significant negative relationships existed between stage 5A and stage 2 ( $-.21281$ ;  $p=.0453$ ); between 5A and stage 3 ( $-.51536$ ;  $p=.0001$ ); and between 5A and the A score ( $-.27889$ ;  $p=.0081$ ).

#### Stage 6 Correlations.

Stage 6 of the DIT considers organizing society by ideals that optimize mutual human welfare. Significant negative correlations existed between stage 6 and stage 2 ( $-.37659$ ;  $p=.0003$ ); between stage 6 and stage 3 ( $-.44638$ ;  $p=.0001$ ); between stage 6 and the A score ( $-.29529$ ;  $p=.0050$ ); and between stage 6 and the M score ( $-.20982$ ;  $p=.0484$ ).

#### P Score Correlations.

The P score of the DIT is the sum of scores from stages 5A, 5B, and 6. It serves as an index of general moral judgment development. Positive correlations of significance were found between the P score and stage 5A ( $.85101$ ;  $p=.0001$ ); between the P score and stage 5B ( $.48473$ ;  $p=.0001$ ); between the P score and stage 6 ( $.54385$ ;  $p=.0001$ ). Negative correlations of significance existed between the P score and stage 2 ( $-.35457$ ;  $p=.0007$ ); between the P score and stage 3 ( $-.45670$ ;  $p=.0001$ ); and between the P score and stage 4 ( $-.47720$ ;  $p=.0001$ ).

#### D Score Correlations.

The D score on the DIT is a composite score based on a scaling analysis of items. It correlated positively with stage 5A ( $.47507$ ;  $p=.0001$ ). Negative correlations existed

between the D score and stage 2 ( $-.28637$ ;  $p=.0207$ ) and between the D score and stage 3 ( $-.43024$ ;  $p=.0003$ ).

### DIT Responder/Non-Responder Analysis

It was noted that a large number of counselors who returned the assessment package did not fill out at all or did not complete the Defining Issues Test. A step-wise discriminant analysis was performed to determine if responders could be discriminated from non-responders by including all of the other variables in this study by predictors. Three variables were found to discriminate between responders and non-responders on the DIT. They were ethnicity, gender, and knowledge score on the HIV questionnaire (Tables 4-18, 4-19, 4-20, and 4-21).

Table 4-18

#### VARIABLES IN THE EQUATION

<u>Variable Entered</u>	<u>Variable Number</u>	<u>Improvement in R Square</u>	<u>Total R Square</u>
Ethnicity	1	.0372	.0372
Gender	2	.0284	.0645
Knowledge	3	.0269	.0897



Table 4-19

ETHNICITY (BY PERCENT)		
	<u>African-American</u>	<u>White</u>
Non-Responders	38.89	22.00
Responders	61.11	78.00
N = 118		

Table 4-20

GENDER (BY PERCENT)		
	<u>Female</u>	<u>Male</u>
Non-Responders	19.75	36.11
Responders	80.25	63.89
N = 117		

Table 4-21

KNOWLEDGE (BY PERCENT, MEDIAN SPLIT)		
	<u>High</u>	<u>Low</u>
Non-Responders	30.16	18.18
Responders	69.84	81.82

## Multiple Regression Analysis of Survey Variables:

### HIV Attitude and HIV Knowledge

In an effort to shed more light on the influence of demographic, Rotter, and Defining Issues Test variables, a step-wise multiple regression was run. The results appear in Tables 4-22 and 4-23. 4-22 shows the results of the first equation in which Attitude was the dependent variable. The twelve independent variables explained 39.98% of the variance in attitude ( $r^2=.3998$ ;  $p=.0542$ ). They were: stage 5B, number of HIV students counseled, stage 2, stage 5A, Davison score (D), stage 3, Principle score (P), years of counseling experience, gender, knowledge, stage 6 and Utilizer score (U).

### Results of Step-Wise Multiple Regression Equations

Table 4-22

ATTITUDE					
Dependent Variable: Attitude					
Analysis of Variance					
	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>	<u>Signif F</u>
Regression	12	1541.26	128.43	2.00	0.0542
Residual	36	2313.80	64.27		
Total	48	3855.06			
<u>Variables in the Equation</u>					
<u>Variable Entered</u>	<u>Variable Number</u>	<u>Improvement in R Square</u>	<u>Total R Square</u>		
Stage 5B	1	.1368	0.1368		
HIV #	2	0.0335	0.1703		
Stage 2	3	0.0283	0.1986		
Stage 5A	4	0.0165	0.2151		
D Score	5	0.0246	0.2397		
Stage 3	6	0.0243	0.2640		
P score	7	0.0206	0.2846		
Couns. Exper.	8	0.023	0.3076		
Gender	9	0.0281	0.3357		
Knowledge	10	0.0258	0.3614		
Stage 6	11	0.0202	0.3817		
U Score	12	0.0181	0.3998		

Table 4-23 shows the results of the second equation with Knowledge as the criterion variable. The ten

independent variables explained 36.90% of the variance in knowledge ( $r^2=.3690$ ;  $p=.0443$ ). The ten independent variables were: Rotter, Meaningless (M) score, marital status, stage 4, stage 2, stage 6, years of counseling experience, number of HIV students counseled, stage 5B, and Davison (D) score.

Table 4-23

<b>KNOWLEGE</b>					
Dependent Variable: Knowledge					
Analysis of Variance					
	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>	<u>Signif F</u>
Regression	10	400.71	40.07	2.15	0.0443
Residual	38	709.53	18.67		
Total	48	1110.24			
<b>VARIABLES IN THE EQUATION</b>					
<u>Variable Entered</u>	<u>Variable Number</u>	<u>Improvement in R Square</u>	<u>Total R Square</u>		
Rotter	1	0.1202	0.1202		
Meaningless (M) Score	2	0.066	0.1862		
Status	3	0.0403	0.2265		
Stage 4	4	0.0344	0.2609		
Stage 2	5	0.0222	0.2831		
Stage 6	6	0.0282	0.3113		
Years Coun.	7	0.0164	0.3277		
HIV Students	8	0.0117	0.3394		
Stage 5B	9	0.0115	0.3509		
Davison (D) Score	10	0.0100	0.3609		

### Summary of Data

This study presented data for 118 secondary school counselors ranging in age from 27 to 68 with work experience of one to thirty-five years. The subjects who responded were predominately white and female. Seventy-four of the respondents reported not having worked with HIV-infected students, while 22 had, and an additional 22 did not know. Support was evidenced for a significant relationship between the level of moral development, as measured by the Defining Issues Test, and the counselors' attitudes about HIV, as measured by the questionnaire. The data did not support a relationship between counselor HIV knowledge and level of moral development (Hypothesis 1). There was statistical support for the existence of a negative correlation between locus of control and counselors' HIV knowledge. The positive relationship between locus of control and attitude was not supported (Hypothesis 2). The study data supported the relationship between counselors' moral level of development and their locus of control. The higher the level of moral development, the lower (internal) the level of locus of control (Hypothesis 3). Additional significant relationships were found and recorded. An analysis of responders versus non-responders on the DIT instrument was performed because of the large number of incomplete or unreturned test forms.

## CHAPTER 5

### DISCUSSION OF THE RESEARCH

#### Emphasis of the Study

This study focused on secondary school counselors working in public schools in the state of Virginia. Using Kohlberg's Theory of Moral Development as a basis, it sought to investigate the relationship of counselors' level of moral development with their attitudes and knowledge about HIV. The correlation between counselor level of moral development and locus of control was also explored. In addition, counselor HIV attitude and knowledge as it relates to locus of control was examined. Of the 286 high school guidance departments contacted, 118 counselors responded. Assessment packets were mailed and returned during Spring, 1995.

#### A View of the Sample Data

Comparison of this study's raw data with normative information from the Defining Issues Test and the Rotter Internal External Locus of Control revealed differences on both instruments. On the DIT the study group's mean score was almost four points higher than that of the norm group. This difference should not be considered statistically

significant, given the standard deviation of approximately 17 for both groups. However, the means do differ in accordance with average education level, and fall between overall norms (34.77) and those of "moral philosophers" (65.1) whose degrees were not specified. The highest degree in the norm group was a bachelor's degree; counselors employed in the state of Virginia must have completed a master's degree. It is also likely that the study group was generally older than the college group used for norming. Murk and Addleman (1992) suggest that an individual's percentage of principled moral reasoning on the DIT is significantly affected by both age and/or education.

On the Rotter Internal External Locus of Control, the study group's mean was almost one point below the mean of the normative group, indicating the counselors were more internally motivated. Again, both the normative group and the study group exhibited standard deviations of approximately 4. So the one point of difference in means is not considered statistically significant. The norm group consisted of elementary psychology majors which would imply that they were young, single, and inexperienced as counselors. Johnson (1992) posits that as people get older, they perceive themselves as having greater control of life events. He also conjectures that married persons, which most in the study group were, feel greater control over the events of their lives.

Four principle criterion variables existed in this study: locus of control (low score for internal motivation and high score for external motivation); level of moral development (represented by the P score of the DIT with high score corresponding with high moral development); knowledge (correct information possessed regarding HIV); and attitude (low score for relative tolerance and high score for relative intolerance).

The P score of the DIT was used to determine counselor level of moral development. It, as well as the other stage scores, provided a number of significant correlations. Male counselors were lower than female counselors in their moral judgment development. Rest (1987) says that moral judgment development can be compared to thinking like a moral philosopher. If we are to infer that female counselors are more philosophical than male counselors, we might consider the route to the counseling career. Traditionally, men were coaches or pre-administrators, not typically philosophical positions, when they became counselors.

White counselors demonstrated a higher index of moral judgment development than African-American counselors. Perhaps this reflects the fact that the African-American culture incorporates some of the negative aspects of the White culture or that there are an insufficient number of positive Black role models.



An interesting negative correlation existed when the more experienced counselors displayed a lower level of moral judgment development. Kohlberg contends that experiences influence moral reasoning. Welfel and Lipsitz (1983) reported on a study that hypothesized that there would be a positive relationship between counselors' work experience and stage of moral reasoning. It was expected, therefore, that after spending years helping young people, veteran counselors would have been at a level where concern for the individual was primary.

The older and more experienced counselors exhibited a higher anti-establishment attitude. It is possible that these children of the '60's still subscribe to the prevailing social climate of their youth or that the younger counselors have a more conformist attitude.

Older counselors did not subscribe to the belief that society must abide by the will of the people or that minimal basic rights had to be protected. An obvious concern is how receptive are older counselors to the rights deserved by HIV-infected students?

White counselors were stronger than African-American counselors in their belief that society is best organized by consensus producing procedures and the use of intuitively appealing ideals. Possibly the results speak to the plight of the African-Americans. While they, too, may believe in a society organized by consensus of the people or based on

intuitively appealing ideals, their experiences of inequality may have negatively impacted their thinking.

The higher the number of years of counseling experience, the older the counselor. This is a relatively trivial finding, since it is obvious that older counselors have had more time to get experience. However, the relationship between years of experience and age is positive as expected, which adds confidence to the data. The higher number of years of counseling experience also meant a higher desire to maintain the existing legal system, roles, and organizational structure. It is possible that the "graying" of Virginia counselors might mean they are not as receptive to the "happenings of the '90's."

Clustering knowledge scores from the HIV questionnaire into low, middle, and high areas, and remembering that the median age of study subjects was 48.5, it is interesting to note that in the 41 to 45 age range, the majority of scores were in the middle. In the 46 to 50 age range, there was a disproportionately high number of counselors with low scores and a low number of counselors with high knowledge scores. The same trend held for the 51 to 55 age group.

A disproportionately high number of males were in the low score range on the HIV knowledge questionnaire. Speculation as to why this is the case includes the possibility that male counselors are more involved in the administrative tasks of the guidance office and do not deal with personal student issues.

Married counselors appeared to be overly represented in the high HIV knowledge category. Singles, widows and widowers seemed to be overly represented in the low HIV knowledge category. This is a surprising finding in light of the fact that those counselors in the latter category might be involved with the "dating scene" and, for their own safety, should be knowledgeable about HIV. It is possible that this segment of the counselor population has fallen into the mental trap of thinking that knowledge or acceptance of HIV information might imply that they are gay.

On the HIV knowledge questionnaire, a disproportionately low number of African-American counselors had high scores. A high number of White counselors demonstrated high knowledge scores on the questionnaire. Whether this is a product of the school system, the community, or the counselor's own neglect or unwillingness to learn is unknown. African-American counselors are in an excellent position to relate to minority adolescents--a high-risk group for contracting the HIV virus widely believed to cause AIDS. The negative correlation that existed between ethnicity and attitude was not significant.

Counselors from the central region of Virginia were over-represented by low scores on the HIV knowledge questionnaire and under-represented by the high scores. Respondents from the eastern region and the northern region were over-represented in the high score range. Counselors

in the eastern and northern areas of Virginia may be more knowledgeable about HIV because they believe the students in their schools are at high risk and they want to be educated. Both the eastern and northern regions of the state are heavily populated with transient families.

Thirteen religious denominations were represented in the survey demographics. Because Virginia is a southern state, it is not surprising that the largest single segment represented was Baptist. In regard to HIV knowledge scores, a disproportionate number of Baptist respondents were in the low category. One possible explanation might be that HIV is associated with sinful behavior and being educated about it is, therefore, unpopular. According to House and Walker (1993), "Churches that subscribe to the belief that sexual relations should occur only within marriage and for purpose of procreation suggest that AIDS education promotes immorality" (p. 285).

In regard to the number of years of counseling experience and knowledge, it is interesting to note that subjects with 21 to 30 years of experience had a disproportionate number of scores in the low HIV knowledge area. Considering the positive correlation between age and experience, perhaps the counselors believe they are too old to learn new information or they are not personally vested in HIV issues, so they cannot relate to them.

As reported in Chapter 4, one counselor reported having worked with ten HIV-infected students. It is interesting to note that that respondent scored in the low range of knowledge scores. Neither an explanation nor an excuse can be provided for this fact.

As mentioned earlier, the low score on the attitude survey represented relative tolerance and the high score represented relative intolerance for HIV issues. The tolerance/intolerance dimension may best be explained by the attitude: HIV is a disease (tolerant) as opposed to the attitude that HIV is a punishment (intolerant) for deviant behavior (homosexual behavior, drug abuse, or just plain sin). In considering the age variable, it is interesting to note that from ages 26 to 45, there were no highly tolerant scores. In only two age categories did attitude scores appear in the high tolerance range--ages 46 to 50 and 51 to 55. Even for those age groups, however, the majority of scores clustered in the middle to high range for intolerance. These findings are consistent with the outcome of a qualitative study conducted by the researcher in the Fall of 1994. Interviews with three veteran school counselors revealed an overwhelming fear of the unknown regarding HIV/AIDS. Carney, Werth and Emanuelson (1994) report that "numerous studies have revealed that members of the 'general public' hold negative prejudicial and discriminatory attitudes toward persons with HIV

disease. . . this may be because in the United States, those who were first diagnosed with the disease were gay men and injectable drug users" (p. 646). Holder (1989) asserts that regardless of their own personal discomforts, school counselors must remember that they may be the only resource for some students who are concerned or confronted with HIV issues. Douce (1993) says, "The reality is that no matter what our role in secondary college or university education and administration, AIDS-and-HIV-related issues will be a part of our personal and professional lives" (p. 259).

#### **Consideration of the Research Hypotheses**

1. It was hypothesized that there would be a significant positive relationship between the level of moral development as measured by the Defining Issues Test and the counselors' HIV knowledge as measured by the questionnaire. It was also hypothesized that there would be a significant negative relationship between level of moral development and counselors' HIV attitudes. The correlation with moral development was not statistically significant for knowledge but was significant for attitude. The data from the study partially supported this hypothesis.

2. It was hypothesized that there would be a significant positive relationship between the locus of control as measured by the Rotter Locus of Control Scale and the counselors' HIV attitudes. It was also hypothesized that

there would be a negative relationship between locus of control and HIV knowledge as measured by the questionnaire. The correlation between the Rotter score was not significant for attitude but was significant for knowledge. The data from the study partially supported this hypothesis.

3. It was hypothesized that there would be a significant negative relationship between counselors' moral level of development as measured by the Defining Issues Test and locus of control as measured by the Rotter Locus of Control Scale. The study data appeared to confirm this hypothesis.

A significant negative relationship existed between level of moral development and attitude. In addition to the overall correlation, in the step-wise multiple regression, the P score was one of eight DIT predictor variables out of twelve that contributed to 1% or more to the improvement of the R square for an overall model significance of  $p=.0542$ . In this analysis and the previous step-wise multiple regression on knowledge, the individual stages and sub-scales of the DIT provided unique contributions to the explanatory power of the multiple regression. Each stage or sub-scale included in the model was an independent predictor of the dependent variable. This speaks to the validity of the construct that each variable is supposed to measure.

According to Kohlberg, the lowest level of moral development is the "punitive" level. Therefore, those counselors indicating a high level of intolerance (AIDS is a

punishment for deviant behavior) may be considered operating at a lower level of moral development. Conversely, those operating at a high level of moral development (principle or conscience-orientation) would reason: "We don't punish individuals for catching measles or chicken pox. AIDS is a disease like measles or chicken pox; therefore, we shouldn't punish people for catching AIDS, either."

Getz (1985) "explored the idea that subjects scoring higher on the DIT not only endorse more liberal views with regard to human rights issues, but also that the structure of their thinking is different from more conservative, lower-scoring subjects on the DIT" (p. 142). Johnston (1985, 1986) discovered a positive relationship between teachers' understanding of specific topics such as "on-task" behavior and levels of moral development as indicated by the DIT.

The hypotheses regarding knowledge were assumed to be mediated at least in part by the attitudes exhibited. A person with an intolerant attitude would probably be less accepting of knowledge or of gaining new knowledge concerning HIV, while a person who is more tolerant would have less emotional (negative) interference with the knowledge acquisition process.

Rest (1979), in reporting on a study by Johnston and Lubormdur, determined that the anticipated positive relationship between locus of control and attitude was not



significant. Neither the pair-wise correlation nor any of the predictor variables in the step-wise multiple regression helped to explain the variance in attitude.

An inverse relationship was found to exist between locus of control and counselor HIV knowledge. Not only was the individual correlation significant, but the locus of control was also an important component in the step-wise multiple regression. The relationship was hypothesized based on the following reasoning: An "external" (high Rotter score) believes that things just happen; they are not under his/her control; they are under the control of "other beings." The "internal," on the other hand, attributes environmental control to him/her self rather than the aforementioned "external" sources. Knowledge is a prime mediator between an individual and his/her control of the environment. Therefore, an "internal" would seek knowledge to enhance the individual's control of the environment, while the "external," who has already attributed the main sources of control to other sources, would not seek knowledge, since it would not affect his/her control of the environment.

As expected, a significant inverse correlation was found to exist between the level of moral development and the locus of control. Getz (1984) "explored the idea that subjects scoring higher on the DIT not only endorse more liberal views with regard to human rights issues, but also

that the structure of their thinking is different from more conservative, lower-scoring subjects on the DIT" (p. 142). Lampe and Walsh (1992) posited that "educators with higher measures of moral development make more liberal ethical decisions while those with lower measures of moral development make more conservative decisions" (p. 31).

Murk and Adelman (1992) concluded that a negative relationship existed between level of moral development and locus of control. The more "internal" (low Rotter score) would exhibit a higher level of moral development, while "externals" (high Rotter score) would exhibit a lower level of moral development. If "things happen," or are under the control of others, there is less impetus to think about or work on moral development. In other words, moral development becomes a mediating variable to environmental control, and if one doesn't have control over his/her environment, there is no reason to acquire a higher level of moral development.

#### **Generalization of the Study**

From the outset of the study, certain restrictions were stated. One caveat applied to the specific residency of all the subjects which might slightly limit generalization to comparable school counselors in other states. However, the survey was used with a random sample of school counselors in the state of Virginia, which makes the results infinitely

generalizable to the population. While Gay (1987) points out that volunteers may differ from non-volunteers, it is not believed that the volunteer status of the subjects in this study limited broad conclusions and generalization. The respondents, by virtue of their employment in Virginia, shared a number of similarities, such as educational degree. It appears reasonable to make the following statements about generalization:

1. The results apply specifically to secondary school counselors employed in the state of Virginia. There is no reason to believe that the specific location would affect the relationships between variables or limit the applicability to counselors in other states.
2. It seems quite possible that the same relationships between variables might apply to middle school counselors, but only further study could confirm this conjecture.

### **Practical Applications**

Keeling (1993) states that "we find HIV, like other critical challenges to health among young people, settled permanently at the intersection where moral and practical philosophy, current culture, socio-economic realities, and politics interact with micro-organisms, chemicals, and physiological processes" (p. 306). The issues surrounding HIV are numerous, and although there are limits to the

generalization of this particular study, there seem to be a number of pragmatic applications for the obtained information. One of the investigator's stated purposes was to assess secondary school counselors' preparedness for dealing with the HIV issue. This is particularly significant in light of Kipke and Hein's (1990) assertion that AIDS is quickly becoming one of the leading causes of death among adolescents. The goal was reinforced by Helge's (1990) contention that the future course of the HIV epidemic might be altered if young people can get correct information from a safe person--a parent, a friend, or a counselor. Carney, Werth and Emanuelson (1994) assert "that the scope of the HIV disease epidemic is such that virtually all mental health professionals will eventually be faced with a client infected with HIV, associated with someone who is infected, or in fear of having been infected. . . effective counseling of individuals with HIV-related concerns requires specialized training" (p. 646). A multitude of studies have been conducted with professionals in the health-related fields regarding HIV knowledge, attitudes, and needs. No studies could be found dealing with school counselors. This deficiency is particularly alarming since, at the present time, the only cure for HIV is prevention, and counselors are in a prime position for taking on the challenge of educating young people. Douce (1993) says that "as student affairs professionals (school counselors), we are the most

knowledgeable and most skilled at designing programs for effective behavior change. We understand student perspectives, speak in the current vernacular, and are committed to student health and development" (p. 259). The study data can be beneficial in educating counselors about HIV. The following demonstrates that counselor education is only one of numerous practical applications for the results of this study about HIV attitude, knowledge, and level of moral development:

HIV education for counselors. As indicated by the study, counselors are starting to work with students with HIV issues. Even those counselors resistant to working with HIV issues have a professional responsibility to know where to refer students seeking help. The need for education is obvious. Those guidance personnel in charge of education might find it helpful to know that counselors in the survey felt there were three reliable sources of HIV information: the health department, in-service training, and professional journals.

College curriculum. Strom and Tennyson (1989) contend that counselor education curricula must "assist students in understanding their presuppositions regarding practice and how their personal values and beliefs impact their reasoning in counseling decisions" (p. 34). Rest (1980) believes that "understanding developmental stages can help school counselors tailor their strategies to address the special needs of their clients" (p. 19).

Counselor support groups. The idea of a support group for counselors working with HIV issues was first presented to the investigator in a qualitative study conducted in the Fall (1994). The need for a group was confirmed by the study data. Dworkin and Pincu (1993) contend that, "when working with an HIV-affected population, there are themes that the counselor must be ready to address with herself or himself and with clients. These themes are complex and sometimes overwhelming and cover a broad spectrum of concerns" (p. 275). It is possible that counselors in our school systems may be called upon to help students resolve issues they have not yet resolved for themselves. "Because this (HIV) is for the most part a sexually transmitted disease, the counselor must confront the theme of sexuality and intimacy. It is also a fatal disease, and death and dying are prevalent themes that are difficult issues for many counselors" (Dworkin and Pincu, 1993, p. 276).

School systems. Many counselors reported not being aware of a school system policy regarding the handling of HIV issues, but felt it would be of value to have one in place. Perhaps the absence of a stated policy gives counselors the false sense of security that there is also an absence of HIV concerns in their school community. In regard to the survey question of who needs to know if an HIV-infected student is attending school, the personnel most often named were the counselor, the principal, and the school nurse.

Surprisingly, only nine respondents felt parents in the community needed to be notified.

State department. Representatives from the state education department might find the survey statistics (one counselor reported working with ten HIV-infected students) helpful when planning workshops, publications, etc.

Professional organizations. With professional journals noted as one of the most reliable sources of HIV information, the study data should encourage professional counseling organizations to publish HIV material and to include HIV workshops in their conventions.

#### **Theoretical Implications of the Study**

"No matter what our theoretical orientation happens to be we are called upon to counsel not only with our clients but also with all of the significant others affected by this disease. We are thrust, almost on a daily basis, into the medical, social, and political systems that our clients face. This disease forces us to confront our beliefs and attitudes about specific stigmatized populations, sexuality, sexual orientation, health, sickness, quality of life, and death and dying" (Dworkin and Pincu, 1993, p. 280).

Kohlberg (Bauman, Dallas; and others, 1991) suggests moral development can be stimulated if there is exposure to a higher level of moral reasoning; if there is exposure to a stimulus that conflicts with or contradicts the current

method of moral reasoning; or if an open atmosphere exists where dialogue about conflicting moral views can occur.

Hayes (1994) contends that counselors are only beginning to understand how Kohlberg's work relates to their own practice. He adds that counselors who can conceptualize their level of moral development may discover that they understand both themselves and their clients more fully.

The present study appears to establish a meaningful relationship between Kohlberg's levels of moral development and both counselors' HIV attitudes and their locus of control. Rest (1980) asserts that "understanding developmental stages can help school counselors tailor their strategies to address the special needs of their clients. Effective strategies synchronize with the developmental readiness of the client" (p. 19). With this information in mind, colleges might want to incorporate an assessment of moral judgment level into their screening process for admission to counselor education programs.

From Kohlberg's work, according to Hayes, several basic assumptions can be derived that are directly relevant for the counseling practice:

Individuals are producers of their own development.

It is not so much that clients have problems as that they experience problems, because how one understands and makes meaning of experience betrays the underlying logic of how one makes sense of one's own existence. The implication of



this self-constructive view of reality is that development is essentially the task of mastering the facts of one's existence.

Development is contextual.

In approaching their work from this perspective, counselors should attempt to provide an environment that will facilitate the client's development by acknowledging the client's reality and by supporting the client's efforts to restore some balance to the world as the client knows it.

Cognition is an active relating of events.

To understand a client is to enter into that region 'between an event and a reaction to it--the place where it actually becomes an event for that person' (Kegan, 1982, p. 2). It is in this zone of mediation that counselors help clients to make meaning of their experience (p. 262).

Development is qualitative reorganization of meaning.

Kohlberg believed that individuals possessed a hierarchical preference for solving problems at the highest level available to him/her. Translated to the counseling setting, this finding suggests that counselors should help clients by clarifying arguments and by supporting or directing attention to arguments at cognitively more complex levels (p. 263).

Reasoning is the key to understanding.

A central focus on individual reasoning demands that the counselor take the client's ideas seriously. Understanding Kohlberg's work helps the counselor to speak the client's language. Instead of focusing on the historical antecedents of present concerns or on the non-judgmental acceptance of the client, Kohlberg's focus on the process of moral reasoning prompts the counselor to focus on the whole person in the process of decision making (p. 263).

Role taking underlies moral development.

Related to the issue of considering care as well as justice orientations, Kohlberg has helped the counselor to see the importance that attends the development of role taking, which is the

tendency to react to the other as someone like the self and by the tendency to react to the self's behavior in the role of the other (p. 264).

Care has been taken not to over-generalize or to imply any causal relationships. The correlations have direct bearing on secondary school counselors employed in public schools in the state of Virginia. The practical applications of the results do appear to extend beyond that group. In considering future research, the following areas should be considered:

1. To what extent would middle school counselors present the same relationships between variables?
2. Would similar results be obtained with secondary school counselors working in other states?
3. Would a needs assessment of students' concerns regarding HIV issues provide school counselors with a basis for determining the type or form of HIV/AIDS education that would be the most beneficial to their counselees. House and Walker (1993) suggest that "youth teaching youth may be the best way to convince teenagers to change their behavior " (p. 283).
4. To what extent would graduate students in counseling programs present the same relationships between variables? Carney, Werth and Emanuelson (1994) report that "although there have been a few studies of graduate students' attitudes toward

persons who are gay, we could find none that examined such students' knowledge and attitudes about HIV disease" (p. 647).

5. What are secondary school counselors' attitudes and knowledge regarding gay adolescents? Dworkin and Pincu (1993) assert that "it is important for counselors working with gay youth to educate them" (p. 278) regarding high-risk sexual behaviors that make them susceptible to sexually transmitted diseases, including the HIV virus widely believed to cause AIDS. An additional issue to be dealt with in future research is counselor awareness of the high rate of suicidal behavior for gay youth.
6. An assessment of counselor homophobia is worthy of study ". . .given that the hardest hit population so far has been gay men. The therapist must explore his or her own attitudes toward gay and lesbian life-styles, (and) AIDS care. . ."  
(Dworkin and Pincu, 1993, p. 275).

### Conclusion

This study focused on 118 secondary school counselors employed in public schools in the state of Virginia. It appeared to support a substantial negative relationship between Kohlberg's level of moral development and HIV attitude. A significant negative relationship also existed

between locus of control and HIV knowledge. As anticipated, the level of moral development and the locus of control presented a significant negative correlation, indicating that the higher the counselors' moral development level, the more internally focused they will be. The findings provide valuable information for those school systems or guidance directors in charge of disseminating HIV information and to college educators as they prepare their counseling curricula.

It is posited that the number of adolescents contracting the HIV virus widely believed to cause AIDS is increasing. At the very least, many teenagers must deal with HIV issues as they pertain to family or friends. Prior research does not exist to assess counselor readiness for working with HIV issues. Previous literature does not provide suggestions for counselor education. This study, while only an initial exploration, confirms that counselors' level of moral development and their locus of control significantly impact their HIV knowledge and attitudes and should be considered in HIV education. "The questions involving HIV, however, center always on that least predictable and certain of modern systems--the human being. . .things are not, cannot necessarily, be made risk free. . .at the level of all that is human, we will have to live and work without guarantees" (Keeling, 1993, pp. 306-307).

## APPENDIX A

Dear Colleague:

As you know, AIDS is becoming one of the leading causes of death among adolescents. You also know that its effects are creating additional demands upon school counselors. As a high school counselor, I am well aware that today's counselors are being called upon to assume new and difficult roles as they deal with this issue. Some of these are:

- (1) being aware of their own personal beliefs about AIDS;
- (2) maintaining local and state policies and procedures;
- (3) dealing with sensitive issues;
- (4) knowing and being able to recognize students' risk-associated behaviors; and
- (5) providing information about referral and support services.

How willing, able, and ready are you for these tasks?

We need your help. We are requesting that you complete these instruments: (1) HIV-Related Knowledge and Attitude Survey, which indicates what counselors know and believe about AIDS; and (2) The Defining Issues Test; and the (3) Internal-External Locus of Control, both of which measure counselors' preferred method of learning. No more than thirty minutes of your time will be needed to complete these instruments. To assure anonymity, neither name nor code numbers are assigned to the enclosed materials.

This study is the basis of a doctoral dissertation for the College of William and Mary. The purpose for the study is to obtain information about a complex issue and to share it with colleagues such as you, as well as education policy makers.

Please call me at (804) 276-8034 if you have questions about the study or if you want a copy of the results. Thank you so much for your help and support.

Yours in education,

Phyllis Jones  
2200 South Providence Road  
Richmond, VA 23236

Enclosures

## APPENDIX B

## HIV-RELATED ATTITUDE AND KNOWLEDGE SURVEY

Demographic Profile

Age: \_\_\_\_\_

Gender:

\_\_\_\_\_ Male

\_\_\_\_\_ Female

Marital Status:

\_\_\_\_\_ Single

\_\_\_\_\_ Married

\_\_\_\_\_ Partnered

\_\_\_\_\_ Divorced

\_\_\_\_\_ Widow/Widower

\_\_\_\_\_ Separated

Ethnic Origin:

\_\_\_\_\_ White

\_\_\_\_\_ African-American

\_\_\_\_\_ Hispanic

\_\_\_\_\_ Asian

\_\_\_\_\_ Native-American

\_\_\_\_\_ Other (Specify):  
\_\_\_\_\_

Region of Virginia:

\_\_\_\_\_ Central

\_\_\_\_\_ Eastern

\_\_\_\_\_ Northern

\_\_\_\_\_ Northwest

\_\_\_\_\_ Southwest

Number of years you  
have been a school  
counselor:  
\_\_\_\_\_Number of HIV-infected  
students with whom you  
have worked:  
\_\_\_\_\_Religious Preference (if any):  
\_\_\_\_\_

Knowledge

1. Have you received HIV/AIDS information?
  - Yes . . . . . (2)
  - No. . . . . (1)
  - Don't know . . . . . (0)
 1. \_\_\_\_\_
  
2. How would you rate the HIV/AIDS information you have received?
  - Very helpful . . . . . (3)
  - Somewhat helpful . . . . . (2)
  - Not helpful. . . . . (1)
 2. \_\_\_\_\_
  
3. How prepared are you to work with a student who has HIV-related issues?
  - Very prepared . . . . . (3)
  - Somewhat prepared. . . . . (2)
  - Not prepared . . . . . (1)
 3. \_\_\_\_\_
  
4. How prepared are you to work with adolescents regarding issues of "risky behaviors" (sex, drugs, etc.)?
  - Very prepared . . . . . (3)
  - Somewhat prepared. . . . . (2)
  - Not prepared . . . . . (1)
 4. \_\_\_\_\_
  
5. A student confides in you that he/she might have AIDS but is not sure where to go for testing. Can you tell him/her?
  - Yes . . . . . (2)
  - No. . . . . (1)
 5. \_\_\_\_\_
  
6. A student needs help in coping with a family member who is dying of AIDS. Are you prepared to counsel this student?
  - Yes . . . . . (2)
  - No. . . . . (1)
 6. \_\_\_\_\_
  
7. Does your school (or school system) have specific guidelines for working with a student who is HIV-infected?
  - Yes . . . . . (2)
  - No. . . . . (1)
  - Don't know . . . . . (0)
 7. \_\_\_\_\_
  
8. What would you consider to be the most reliable source(s) of HIV/AIDS information for you? (Check all that apply.)
  - Professional journals . . . . . (6)
  - In-service training . . . . . (5)
  - Health department. . . . . (4)
  - Newsletter/bulletin . . . . . (3)
  - Mental health department . . . . . (2)
  - Adolescent with HIV/AIDS . . . . . (1)
  - Other \_\_\_\_\_ (0)
 8. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \* \_\_\_\_\_  
 \_\_\_\_\_

9. Talk about HIV/AIDS information as it relates to my role as a school counselor and I will be more receptive to receiving it.  
 Agree. . . . . (2)  
 Disagree. . . . . (1) 9. \_\_\_\_\_
10. A confirmed positive antibody test means the person is carrying the HIV virus.  
 True . . . . . (2)  
 False. . . . . (1)  
 Don't know . . . . . (0) 10. \_\_\_\_\_
11. A confirmed positive antibody test means the person can transmit the HIV virus to others.  
 True . . . . . (2)  
 False. . . . . (1)  
 Don't know . . . . . (0) 11. \_\_\_\_\_
12. A negative antibody test means a person is definitely not carrying the HIV virus.  
 False. . . . . (2)  
 True . . . . . (1)  
 Don't know . . . . . (0) 12. \_\_\_\_\_
13. Likelihood of becoming HIV-infected from being bitten by a mosquito is:  
 Not at all likely. . . . . (4)  
 Not very likely . . . . . (3)  
 Somewhat likely . . . . . (2)  
 Very likely. . . . . (1) 13. \_\_\_\_\_
14. Likelihood of contracting the HIV virus from an infected student sneezing on you is:  
 Not at all likely. . . . . (4)  
 Not very likely . . . . . (3)  
 Somewhat likely . . . . . (2)  
 Very likely. . . . . (1) 14. \_\_\_\_\_
15. Likelihood of becoming HIV-infected from using public facilities such as buses or telephones is:  
 Not at all likely. . . . . (4)  
 Not very likely . . . . . (3)  
 Somewhat likely . . . . . (2)  
 Very likely. . . . . (1) 15. \_\_\_\_\_
16. Likelihood of becoming HIV-infected from donating blood is:  
 Not at all likely. . . . . (4)  
 Not very likely . . . . . (3)  
 Somewhat likely . . . . . (2)  
 Very likely. . . . . (1) 16. \_\_\_\_\_



17. Likelihood of a person becoming HIV-infected from an HIV-positive person kissing him/her on the cheek is:

Not at all likely. . . . .	(4)	
Not very likely . . . . .	(3)	
Somewhat likely . . . . .	(2)	
Very likely. . . . .	(1)	17. _____

18. Likelihood of a person becoming HIV-infected from having a blood transfusion is:

Not at all likely. . . . .	(4)	
Not very likely . . . . .	(3)	
Somewhat likely . . . . .	(2)	
Very likely. . . . .	(1)	18. _____

19. My school has a list of resources available for students who are HIV-positive or have AIDS?

Yes . . . . .	(2)	
No. . . . .	(1)	
Don't know . . . . .	(0)	19. _____

20. Have you had the experience of knowing anyone who was HIV-positive or had AIDS?

Yes . . . . .	(2)	
No. . . . .	(1)	
Don't know . . . . .	(0)	20. _____

21. Likelihood of a student becoming HIV-infected if an HIV-positive person lived in the same house with him/her is:

Not at all likely. . . . .	(4)	
Not very likely . . . . .	(3)	
Somewhat likely . . . . .	(2)	
Very likely. . . . .	(1)	21. _____

22. Likelihood of a person becoming HIV-infected if an HIV-positive person shook hands with him/her is:

Not at all likely. . . . .	(4)	
Not very likely . . . . .	(3)	
Somewhat likely . . . . .	(2)	
Very likely. . . . .	(1)	22. _____

23. Likelihood of a student becoming HIV-infected if an HIV-positive person had sexual intercourse with him/her without a condom is:

Very likely. . . . .	(4)	
Somewhat likely . . . . .	(3)	
Not very likely . . . . .	(2)	
Not at all likely. . . . .	(1)	23. _____

24. Likelihood of a student becoming HIV-infected if an HIV-positive person shared an I.V. needle with him/her is:
- |                            |     |           |
|----------------------------|-----|-----------|
| Very likely. . . . .       | (4) |           |
| Somewhat likely . . . . .  | (3) |           |
| Not very likely . . . . .  | (2) |           |
| Not at all likely. . . . . | (1) | 24. _____ |

25. Is there a community-based AIDS program in your area?
- |                      |     |           |
|----------------------|-----|-----------|
| Yes . . . . .        | (2) |           |
| No. . . . .          | (1) |           |
| Don't know . . . . . | (0) | 25. _____ |

Attitudes

26. If I have a counselee who is HIV-infected, I would rather not know it.
- |                            |     |           |
|----------------------------|-----|-----------|
| Strongly agree. . . . .    | (4) |           |
| Agree. . . . .             | (3) |           |
| Disagree. . . . .          | (2) |           |
| Strongly disagree. . . . . | (1) | 26. _____ |

27. Students who are HIV-infected should not be allowed to attend public schools.
- |                            |     |           |
|----------------------------|-----|-----------|
| Strongly agree. . . . .    | (4) |           |
| Agree. . . . .             | (3) |           |
| Disagree. . . . .          | (2) |           |
| Strongly disagree. . . . . | (1) | 27. _____ |

28. It is not likely that the students with whom I work will engage in the behaviors that put them at risk for contracting the HIV virus.
- |                            |     |           |
|----------------------------|-----|-----------|
| Strongly agree. . . . .    | (4) |           |
| Agree. . . . .             | (3) |           |
| Disagree. . . . .          | (2) |           |
| Strongly disagree. . . . . | (1) | 28. _____ |

29. People with AIDS are unfairly stigmatized and discriminated against.
- |                            |     |           |
|----------------------------|-----|-----------|
| Strongly disagree. . . . . | (4) |           |
| Disagree. . . . .          | (3) |           |
| Agree. . . . .             | (2) |           |
| Strongly agree. . . . .    | (1) | 29. _____ |

30. If an HIV-infected student enrolls in your school, who should be informed? (Check all that apply.)
- |   |     |           |
|---|-----|-----------|
| Counselor . . . . .                       | (9) | 30. _____ |
| Principal . . . . .                       | (8) | _____     |
| Teachers of the infected student. . . . . | (7) | _____     |
| All teachers in the school. . . . .       | (6) | _____     |

Students in the classroom of the infected student . . . . .	(5)	_____
All students in the school. . . . .	(4)	_____
Parents in the school community . . . . .	(3)	_____
School nurse . . . . .	(2)	_____
No one . . . . .	(1)	_____
Other _____	(0)	* _____

31. In regard to an HIV-infected student, the rights of the whole student body must take precedence over the rights of the individual.
- |                            |     |           |
|----------------------------|-----|-----------|
| Strongly agree. . . . .    | (4) |           |
| Agree. . . . .             | (3) |           |
| Disagree. . . . .          | (2) |           |
| Strongly disagree. . . . . | (1) | 31. _____ |
32. I have all the HIV/AIDS information I need.
- |                            |     |           |
|----------------------------|-----|-----------|
| Strongly agree. . . . .    | (4) |           |
| Agree. . . . .             | (3) |           |
| Disagree. . . . .          | (2) |           |
| Strongly disagree. . . . . | (1) | 32. _____ |
33. People who get cancer are victims; people who get AIDS have probably done something to put themselves at risk for contracting the disease.
- |                            |     |           |
|----------------------------|-----|-----------|
| Strongly agree. . . . .    | (4) |           |
| Agree. . . . .             | (3) |           |
| Disagree. . . . .          | (2) |           |
| Strongly disagree. . . . . | (1) | 33. _____ |
34. How willing are you to work with gay/bisexual students?
- |                              |     |           |
|------------------------------|-----|-----------|
| Not at all willing . . . . . | (4) |           |
| Not very willing . . . . .   | (3) |           |
| Somewhat willing . . . . .   | (2) |           |
| Very willing . . . . .       | (1) | 34. _____ |
35. How willing are you to work with HIV-infected students?
- |                              |     |           |
|------------------------------|-----|-----------|
| Not at all willing . . . . . | (4) |           |
| Not very willing . . . . .   | (3) |           |
| Somewhat willing . . . . .   | (2) |           |
| Very willing . . . . .       | (1) | 35. _____ |
36. How reluctant would you be to sit in the same room with an HIV-infected student?
- |                      |     |           |
|----------------------|-----|-----------|
| Very . . . . .       | (4) |           |
| Somewhat. . . . .    | (3) |           |
| Not Very. . . . .    | (2) |           |
| Not at all . . . . . | (1) | 36. _____ |

37. How reluctant would you be to hug an HIV-infected student?  
 Very . . . . . (4)  
 Somewhat. . . . . (3)  
 Not very. . . . . (2)  
 Not at all . . . . . (1) 37. \_\_\_\_\_

38. How reluctant would you be to touch objects that an HIV-infected student had touched?  
 No. . . . . (4)  
 Yes . . . . . (3)  
 Somewhat. . . . . (2)  
 Very . . . . . (1) 38. \_\_\_\_\_

39. Should there be any professional/legal penalties for counselors who refuse to work with HIV-infected students?  
 Yes . . . . . (2)  
 No. . . . . (1)  
 Don't know . . . . . (0) 39. \_\_\_\_\_

40. Laws should be passed to protect people from discrimination because of HIV/AIDS.  
 Strongly disagree. . . . . (4)  
 Disagree. . . . . (3)  
 Agree. . . . . (2)  
 Strongly agree. . . . . (1) 40. \_\_\_\_\_

41. People with AIDS should be isolated or quarantined.  
 Strongly agree. . . . . (4)  
 Agree. . . . . (3)  
 Disagree. . . . . (2)  
 Strongly disagree. . . . . (1) 41. \_\_\_\_\_

42. Should people who are getting married have mandatory HIV/AIDS testing?  
 Yes . . . . . (2)  
 No. . . . . (1) 42. \_\_\_\_\_

43. HIV/AIDS education should be a part of the high school curriculum.  
 Strongly disagree. . . . . (4)  
 Disagree. . . . . (3)  
 Agree. . . . . (2)  
 Strongly agree. . . . . (1) 43. \_\_\_\_\_

44. Should people who handle food in public places have mandatory HIV/AIDS testing?  
 Yes . . . . . (2)  
 No. . . . . (1)  
 Don't know . . . . . (0) 44. \_\_\_\_\_

- 45. Should lesbians have mandatory HIV/AIDS testing?  
 Yes . . . . . (2)  
 No. . . . . (1)  
 Don't know . . . . . (0) 45. \_\_\_\_\_
  
- 46. Should students caught with drugs at school have mandatory HIV/AIDS testing?  
 Yes . . . . . (2)  
 No. . . . . (1)  
 Don't know . . . . . (0) 46. \_\_\_\_\_
  
- 47. Should homosexual men have mandatory HIV/AIDS testing?  
 Yes . . . . . (2)  
 No. . . . . (1)  
 Don't know . . . . . (0) 47. \_\_\_\_\_
  
- 48. Should pregnant women have mandatory HIV/AIDS testing?  
 Yes . . . . . (2)  
 No. . . . . (1)  
 Don't know . . . . . (0) 48. \_\_\_\_\_
  
- 49. Should students who are being admitted to college have mandatory HIV/AIDS testing?  
 Yes . . . . . (2)  
 No. . . . . (1)  
 Don't know . . . . . (0) 49. \_\_\_\_\_
  
- 50. If counseling students with HIV/AIDS becomes a part of your job, would a counselors' support group be of benefit to you?  
 No. . . . . (2)  
 Yes . . . . . (1)  
 Don't know . . . . . (0) 50. \_\_\_\_\_

**APPENDIX C**

## APPENDIX D

## Regions of Virginia

Central

Chesterfield  
Crater  
Hanover  
Henrico  
Piedmont  
Richmond  
Southside

Northwest

Shenandoah  
Lord Fairfax  
Rappahanock  
Rapidan  
Thomas Jefferson

Eastern

Chesapeake  
Eastern Shore  
Hampton  
Norfolk  
Peninsula  
Portsmouth  
Three Rivers  
Virginia Beach  
Tidewater

Southwest

Alleghany  
Mt. Rogers  
New River  
Pittsylvania-Danville

Northern

Alexandria  
Arlington  
Fairfax  
Loudon  
Prince William

## APPENDIX E

## INTERPRETATIONS FOR DIT SCORES\*\*

Stage 2 focuses on the fairness of exchanging a favor for a favor.

Stage 3 focuses on good or evil intentions and on maintaining friendships, relationships, and approval.

Stage 4 focuses on maintaining the legal system and roles as they currently exist. There is an emphasis on formal organizational structure.

Stage 5A focuses on honoring the people's will and providing a day in court for everyone. Minimal basic rights are sacred.

Stage 5B focuses on the use of intuitively appealing ideals to organize social arrangements and relationships. A rationale for obtaining general support is sometimes lacking.

Stage 6 focuses on optimizing mutual human welfare and organizing society by using ideals that eliminate arbitrary factors.

A represents an anti-establishment attitude.

M represents "meaningless" items. They serve as an internal reliability check to determine if the subjects are following directions.

P represents the scores of Stages 5A, 5B, and 6 summed and converted to a percent (general index of moral judgment development).

D is a composite score derived from a scaling analysis of DIT items.

U (Utilizer score) represents the degree to which the concepts of justice are used by a subject to make moral judgments.

\*\*Source: Rest, J.R. (1983). Guide. Minneapolis: University of Minnesota Press, 12-13.



## REFERENCES

Agresti, A.A. (1990). AIDS education: professional ethics, social advocacy, and religious views. Counseling and Values, 34(3), 217-219.

Adolescents, AIDS, and HIV. The Facts. Centers for Disease Control.

Bandura, A. (1991). Social cognitive theory of moral thought and action. In Kurtiness, W.N. & Gerwitz, J. L. (Eds.), Handbook of Moral Behavior and Development, (p. 47), New Jersey: Lawrence Earlbaum Associates.

Bauman, Dallas, & Others (1991). AIDS Education: Effective Behavior Change Using a Peer Based Model. Paper presented at the meeting of the American College Personnel Association, Atlanta, GA.

Berkowitz, M.W. (1988). Try and catch the wind: Dialogue, dialects, and development in Kohlberg's life and legacy. Counseling and Values, 32(3), 179-186.

Bernstein, C.A., Liller, K.D., & Rosevelt, S.J. (1990). AIDS related knowledge, attitudes, and behaviors: A comparison of allied health and non-allied health students. Academic Medicine, 65(7), 458-460.

Borg, W.R., & Gall, M.P. (1983). Educational Research: An Introduction. New York: Longman, Inc.

Boyd, D. (1988). The personal and the (inter)disciplinary: Reflections on Larry Kohlberg as my mentor. Counseling and Values, 32(3), 170.

Butcher, E., & Herbert, D.J. (1985). Locus of control similarity and counselor effectiveness: A matched case study. Journal of Counseling and Development, 64, 103-108.

Carney, J., Werth, J., and Emanuelson, G. (1994). The relationship between attitude toward persons who are gay and persons with AIDS, and HIV and AIDS knowledge. Journal of Counseling and Development, 72(6), 646-650.

Carroll, J.A. (1977). Cognitive and political attitude correlates of the Defining Issues Test. (Report No. TM 007 081). Arizona State University. (ERIC Document Reproduction Service No. ED 156 682).

Centers for Disease Control and Prevention. (1995). HIV/AIDS Prevention. Rockville, MD.

DeVries, R. (1991). The cognitive-developmental paradigm. In Kurtines, W.N., & Gewirtz, J.L. (Eds.), Handbook of Moral Behavior and Development (p. 7). New Jersey: Lawrence Erlbaum Associates.

Donnan, H.H., & Pipes, R.B. (1985). Counselor trainees' explanations of behavior: Attributions to traits, situations, and interaction. Journal of Clinical Psychology, 41(5), 729-732.

Douce, L.A. (1993). AIDS and HIV: Hopes and challenges for the 1990's. Journal of Counseling and Development, 71(3), 259-260.

Dworkin, S.H., & Pincu, L. (1993). Counseling in the era of AIDS. Journal of Counseling and Development, 71(3), 275-281.

Foon, A.E. (1986). Effect of locus of control on counseling expectations of clients. Journal of Counseling Psychology, 33(4), 462-464.

Fry, P.S. (1975) Interaction between locus of control, level of inquiry, and subject control in the helping process: A laboratory analogue study. Journal of Counseling Psychology, 22(4), 280-287.

Gay, L.R. (1987). Educational Research. Columbus: Merrill Publishing Company.

Gerwitz, J.L. (1991). Prologue--Lawrence Kohlberg's life and work from the vantage of a long-time friend and colleague: A memoir. In Kurtines, W.N., & Gerwitz, J.L. (Eds.), Handbook of Moral Behavior and Development (p. 1), New Jersey: Lawrence Earlbaum Associates.

Hayes, R.L. (1994). The legacy of Lawrence Kohlberg: Implications for counseling and human development. Journal of Counseling and Development, 72(3), 261-267.

Hein, K. (1990). Lessons from New York City on HIV/AIDS in adolescents. New York State Journal of Medicine, 90(3), 143-145.

Helge, D. (1990). Needs of rural schools regarding HIV education. Rural Special Education Quarterly, 10(2), 21-29.

HIV/AIDS Prevention Education Curriculum Guide. (1992). Virginia Department of Education.

Holder, J.R. (1989). AIDS: A training program for school counselors. The School Counselor, 36(4), 305-309.

House, R. & Walker, C. (1993). Preventing AIDS via education. Journal of Counseling and Development, 71(3), 282-289.

Hult, R.E. (1979). The relationship between ego identity status and moral reasoning in university women. The Journal of Psychology, 103, 203-207.

Johnson, E.E., Nora, R.M., & Bustos, N. (1992). The Rotter I-E scale as a predictor of relapse in a population of compulsive gamblers. Psychological Reports, 70, 691-696.

Keeling, R. P. (1993). Commentary: Educating and counseling about HIV in the second decade. Journal of Counseling and Development, 71(3), 306-309.

Kipke, M.D., & Hein, K. (1990). Acquired immunodeficiencies syndrome (AIDS) in adolescents. Adolescent Medicine, 1(3), 429-449.

Krebs, D.L., Vermueulen, S.C., Carpendale, J., & Denton, K. (1991). Structural and situational influences on moral judgment: The interaction between stage and dilemma. In Kurtines, W.N., & Gewirtz, J.L. (Eds.), Handbook of Moral Behavior and Development (pp. 139-166). New Jersey: Lawrence Erlbaum Associates.

Lampe, J.R., & Walsh, S.K. (1992). Reflective Teachers Ethical Decision-Making Processes. Paper presented at the meeting of the American Educational Research Associates, San Francisco, CA.

Lickona, T. (1988). Kohlberg and moral education: Back to virtue. Counseling and Values, 32(3), 187-207.

Locke, D.C., & Tucker, D.O. (1988). Race and moral development scores. Counseling and Values, 32(3), 232-235.

Martin, R.D., & Shepel, L.F. (1974). Locus of control and discrimination ability with lay counselors. Journal of Consulting and Clinical Psychology, 42(5), 741.

McDermott, R.J., Liller, K.D., & Rosevelt, S.J. (1990). AIDS related knowledge, attitudes, and behaviors: a comparison of allied health and non-allied health students. Journal of Studies in Technical Careers, 12(2), 93-104.

Mentkowski, M. (1988). Educating for moral development: Lessons learned from experience. Counseling and Values, 32(3), 193-199.

Mohr, P.H. (1987). Moral reasoning in early adolescence: Implications for drug prevention. The School Counselor, 35(2), 120-127.

Monet, D.R., Sullivan, T.J., & DeJong, C.R. (1990). Applied Social Research (p. 290). Fort Worth: Holt, Rinehart and Winston, Inc.

Mosher, R. (1988). Lawrence Kohlberg: A personal tribute. Counseling and Values, 32(3), 201-207.

Murk, D.A., & Addleman, J.A. (1992). Relations among moral reasoning, locus of control, and demographic variables among college students. Psychological Reports, 70, 467-476.

Nucci, L.P. (1988). Standing on shoulders: Reflections on the work of Lawrence Kohlberg. Counseling and Values, 32(3), 208-212.

Paradise, L.V. (1976). Toward a Theory on the Ethical Behavior of Counselors. Unpublished doctoral dissertation. University of Virginia, Charlottesville, VA.

Parr, G.D., & Ostrovsky, M. (1991). The role of moral development in deciding how to counsel children and adolescents. The School Counselor, 39(1), 14-19.

Power, F.C. (1988). From moral judgement to moral atmosphere: The sociological turn in Kohlbergian research. Counseling and Values, 32(3), 172-177.

Renn, R. W., & Vandenberg, R.J. (1991). Differences in employee attitudes and behaviors based on Rotter's (1966) internal-external locus of control: Are they all valid? Human Relationships, 44(11), 1161-1177.

Rest, J.R. (1979). Development in Judging Moral Issues. Minneapolis: University of Minnesota Press.

Rest, J.R. (1983). Guide. Minneapolis: University of Minnesota Press.

Rest, J.R. (1986). Moral Development: Advances in Research and Theory. New York: Praeger.

Rich, J.M., & DeVitis, J.L. (1985). Theories of Moral Development. Illinois: Charles C. Thomas.

Robinson, J.P., & Shaver, P.R. (1970). Measures of Social Psychological Attitudes (pp. 143-147). Ann Arbor: Institute for Social Research, University of Michigan.

Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80(609), 1-28.

Rudestam, K.E., & Rae, R.N. (1992). Surviving Your Dissertation. Newbury Park: SAGE Publications.

Russell, T.G. (1989). AIDS Education, homosexuality, and the counselor's role. The School Counselor, 36(5), 333-337.

Ruzicka, S. (1987). Attitudes of counselor to handicapped studies. Camping Magazine, 59(3), 28-29.

St. Lawrence, J.S., Kelly, J.A., Owen, A.D., Hogan, I.G., & Wilson, R.A. (1990). Psychologists' attitudes toward AIDS. Psychology and Health, 4, 357-363.

Scharder, D. (1990). The Legacy of Lawrence Kohlberg. San Francisco: Jossey-Bass, Inc.

Sonnert, G., & Commons, M.L. (1992). Society and the highest stages of moral development. (Report No. CG 024 418). Boston, MA: Annual Meeting of the Eastern Psychological Association. (ERIC Document Reproduction Service No. ED 348 600).

Strom, S.M., & Tennyson, W.W. (1989). Developing moral responsibility through professional education. Counseling and Values, 34(1), 33-42.

Surveillance Report for Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV) Infection. (1992). Department of Health. Commonwealth of Virginia.

Teenagers and AIDS. (1992). Newsweek, 45-49.

Tsujimoto, R.N. (1982). Guttman Scaling of Moral Comprehension Stages. Psychological Reports, 51, 550.

Turiel, E. (1990). Moral judgment, action, and development. In Schrader, D. (Ed.). The Legacy of Lawrence Kohlberg (pp. 31-49). San Francisco: Jossey-Bass, Inc.

Welfel, E.R., & Lipsitz, N.E. (1983). Moral reasoning of counselors: Its relationship to level of training and counseling experience. Counseling and Values, 27(4), 194-203.

Wilmouth, G.H., & McFarland, S.G. (1976). A Comparison of Four Measures of Moral Reasoning. (Report No. TM 006 030).

Washington, D.C.: Annual Meeting of the American Psychological Association. (ERIC Document Reproduction Service No. ED 134 621).

Wu, Y.B., Adams, J.G., & Scherer, Y.K. (1990). How much do future teachers know about AIDS? Action in Teacher Education, 12(3), 37-42.

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