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Effects of athletic participation and gender on moral judgment in student athletes and nonathletes

Elizabeth Mary Baldizan

University of Nevada, Las Vegas

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Effects of athletic participation and gender on moral judgment in student athletes and nonathletes

Baldizan, Elizabeth Mary, Ed.D.

University of Nevada, Las Vegas, 1993
EFFECTS OF ATHLETIC PARTICIPATION AND GENDER ON MORAL JUDGMENT IN STUDENT ATHLETES AND NONATHLETES

by

Elizabeth M. Baldizan

A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Education

in

Higher Education Administration

Department of Educational Administration and Higher Education, University of Nevada, Las Vegas
May 1993
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University of Nevada, Las Vegas,
Spring, 1992
Abstract

Effects of Athletic Participation and Gender on Moral Judgment in Student Athletes and Nonathletes

The purpose of this study was to assess moral development of student athletes and nonathletes, employing James Rest's (1979, 1988) *Defining Issues Test* (DIT). Rest adapted Kohlberg's cognitive moral development theory to an objective measurement tool, the *Defining Issues Test*, which investigates moral judgment by examining the choices an individual makes in solving a series of moral dilemmas. Each subject obtained a Principled Morality Score which was interpreted as the relative importance attributed to principled moral considerations in making moral decisions. Participants for the study from intercollegiate athletics were from women's basketball and softball teams, and men's intercollegiate soccer and baseball teams. A control group of student nonathletes from a general education class was also established. Participants completed a biographical questionnaire to determine the independent variables of sports participation and gender. By administering the *Defining Issues Test* to a sampling of undergraduate student nonathletes and a comparable undergraduate sampling of student athletes, the level of moral reasoning between these two populations and the possible effects of intercollegiate athletic involvement on moral judgment was assessed and analyzed at the University of Nevada, Las Vegas.
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In Memory of Jerald J. Wilson

and

In Honor of A. Ricardo Baldizan
CHAPTER 1

INTRODUCTION AND BACKGROUND

Throughout history, philosophical statements speak to the value of education and its effect on the individual. But an educated person, while always searching, is also guided by civility and integrity, by commitments and convictions (Boyer, 1987).

University Responsibility

Historically, the role of universities acting as in loco parentis was an expectation rarely challenged by the privileged few who attended institutions of higher learning. Spiritual, moral, vocational as well as intellectual developmental outcomes encompassed this paternalistic philosophy (Hanson 1982).

However, the Land Grant Act of 1862 resulted in the creation of sixty-nine state (secular) institutions which, in turn, increased a distinction between the intellectual and moral or religious development of the student (Cowley, 1949). In the University's desire and need to participate in the rapidly developing industrial and economic revolution, the role of the faculty changed dramatically. An emphasis upon research and scholarship and the concept of "ethical neutrality" emerged. The primary role of the professor became scholarship, and not the moral development of the students (Sandeen, 1985).

The civil rights movement of the 1960s later forced both a legal and philosophic change. A new priority for administrative responsibility was to provide due process rights (Barr, 1983). Certainly
the 1960s brought monumental change to the character of student life. The problem was, however, that while colleges were no longer parents, no new theory of campus governance emerged to replace the old assumptions (El-Khawas, 1979). Unlike the previous parental role, the following three decades struggled to define a new role.

Thomas (1985) documented how the administrative role changed, yet the student expectation remained the same. Institutions began to formulate systems that transformed the parental role to a judicial role, shifting the institutional focus from facilitating growth to defending punitive outcomes. Conversely, students continued to look to institutions as models of social responsibility.

Although educating the whole person remained an integral concept to institutions of higher learning, there was ambivalence and competing purposes amid university officials in dealing with students. For some, although college officials knew they were no longer "parents," they also knew that their responsibilities, both legal and moral, extended far beyond the classroom (El-Khawas, 1979). For others, avoidance of legal responsibility resulted in a neglect of moral obligations inherent in the student-teacher relationship, including the obligation to "enforce a standard of civility" on campus (Bickel, 1992). A developing consensus among educators, foundations, and critics of higher education has been that most colleges had defined their role too narrowly, resulting in serious educational and societal costs (Ignelzi, 1990). In short, the role of moral education in higher education, when traced, gives attention to the void created by the abandonment of in loco parentis models (Brown and Canon, 1978).

Today there appears that institutions of higher learning have returned to the purpose of in loco parentis (Pavela, 1992). The process may have changed, but it is understood that the purpose for student affairs professionals includes assisting students to explore and understand their developing ethical values and to learn effective citizenship (Ignelzi, 1990). This was the conclusion in College: The Undergraduate Experience in America, an extensive study conducted through the Carnegie Foundation for the Advancement of Teaching (Boyer, 1987).
Intercollegiate Athletic Role

Given this philosophic foundation within Student Affairs, the role of intercollegiate athletics in American higher education and the effect on students who participate in certain highly emphasized sports have been subjects of a long standing debate (Hood, Craig & Ferguson, 1992). The meaningfulness and validity in the contention that sport promotes moral growth have been questioned (Silva & Weinberg, ed, 1984).

Whereas some persons expect to find integrity and honor within intercollegiate athletics more than in any other aspect of society, others contend that athletics have been prostituted by materialistic values and has a merchandising character wherein the struggle is solely for a prize (Miller, 1980). Although participation in intercollegiate athletics (without differentiating among the different sports) has been found to be positively related to satisfaction with the collegiate experience and to self ratings on leadership (Ryan, 1989), it has not been found to be related to a measure of self actualization (Gundersheins, 1982). Weiss and Bredemeir (1990) advocate that the current prevalence of stories that suggest sport promoting unethical thoughts and behaviors creates a significant arena for studying moral development. Other researchers have also concluded that sports participation adversely affects moral behavior (McIntosh, 1979; Miller, 1988; Santomier, Howard, Piltz, & Romance, 1980). Additionally, they have found a correlation between gender and moral judgment in collegiate athletics.

Indeed, educators have questioned the values being transmitted to and learned by student athletes as they move through the educational system. Although sport participation and moral development have been intimately related as far back as the mid-19th century, it has only been over the last decade that empirical research studies of moral development in sport have emerged (Weiss, Bredemeir, 1990).
Society expects athletes to be role models because of the nature of the games. But, as pointed out in a recent commentary by Telander (1991):

games are not like life, no matter what your eighth-grade coach told you. They are wonderfully unlike life in that they have specific beginnings and ends, precise rules, prescribed boundaries, judges, penalties, timeouts and, at the end, losers and winners. Do we have any of those things for sure in life? No (p.108).

Intercollegiate sport, as the most visible program of American higher education, may have contributed to an image of college character according to Chu (1989). By demonstrating heroic moral behavior in the face of the contrived stress of symbolic competition, the young athletes... may model for students and the community the highest qualities of the society (p.179). Therefore, intercollegiate athletics carries a powerful influence in reflecting moral behavior through competition.

There has developed a striking similarity between the philosophic intent of student affairs and intercollegiate athletics. In both arenas, the role of education has soundly supported more than intellectual development, seeking socially responsible citizens within the university community and ultimately, in society.

Moral Judgment and Gender Difference

Kohlberg (1969) initially presented a paper at Dartmouth College in which he argued that a college does have a responsibility for the moral development of its students (Ignelzi, 1990). He theorized that cognitive moral development progresses through an invariant sequence of six stages and that each stage reflects a higher level of moral judgment through the increasingly complex ordering and coordinating of moral values (Zimmerman, 1991). Personal development was conceptualized as a slow progression through a sequence of stages (Sapp, 1986).
Rest (1979, 1988) adapted Kohlberg's theory to an objective measurement tool, the Defining Issues Test, which investigated moral judgment by examining the choices an individual makes in solving a series of moral dilemmas. The Defining Issues Test is a test that assesses moral judgment by an objective format. Each subject obtains a Principled Morality Score, the "P" index. This score is interpreted as the relative importance attributed to principled moral considerations in making moral decisions (Sapp, 1986).

Rest has asserted that sex differences in the Defining Issues Test are trivial (1986). However, in Gilligan's (1982) work, In a Different Voice, she suggested that most males incorporate a justice perspective which saw people as differentiated and independent, focused on the rights of individuals. Comparatively, most females incorporated a care perspective which saw people as interconnected and needing to communicate to mutually solve problems (Romer, 1991). In short, these were the "different voices" Gilligan proposed which guided women in moral judgment. In another perspective, Chodorow (1978) saw the paradigms of moral development not in terms of gender differences, but rather in socially defined gender relations (Romer, 1991). Furthermore, research has found that when males and females are given equal power, access to resources, and feedback on their performance, women's behavior and judgments reflected a similar sense of self-confidence, individual focus, independent judgment, as well as caring and nurturance (Major, 1987). It is for these reasons that Rest's assertions that sex differences were trivial within the context of the Defining Issues Test, may hold true.

The role of universities to address moral judgment has long been accepted; however, it remains ambiguous how it is achieved. Juxtaposed with intercollegiate athletes and the level of moral judgment between genders, the effects of intercollegiate athletic participation and gender on moral judgment warrants exploration.
Statement of the Problem

The purpose of this study was to examine the effects of intercollegiate athletic participation and gender on moral judgment for selected students who were athletes and nonathletes at the University of Nevada, Las Vegas, employing Rest's (1979, 1988) Defining Issues Test.

The following questions served as the basis for the collection and analysis of data:

1. Did athletes score lower in their Principled Morality Score on moral judgment than their nonathletic peers?
2. Did males score lower in their Principled Morality Score on moral judgment than their female peers?
3. Did male athletes score lower in their Principled Morality Score on moral judgment than female athletes, male nonathletes, and female nonathletes?
4. Did female athletes score lower in their Principled Morality Score on moral judgment than male and female nonathletes?

Hypotheses

The null hypotheses tested were:

1. There was no statistically significant difference at the 0.05 level between athlete scores on moral judgment, as measured by the Principled Morality Score, and their nonathletic peers.
2. There were no statistically significant differences at the 0.05 level between males and females on moral judgment as measured by the Principled Morality Score.
3. There were no statistically significant differences at the 0.05 level between male athletes as compared with female athletes, male nonathletes and female nonathletes on moral judgment as measured by the Principled Morality Score.
4. There were no statistically significant differences at the 0.05 level between female athletes and male and female nonathletes on moral judgment as measured by the Principled Morality Score.

Research Hypotheses

Based on the statement of the problem, null hypotheses, and previous research, the anticipated results of this study were:

1. There were statistically significant differences at the 0.05 level among athletes and their nonathletic peers on moral judgment as measured by the Principled Morality Score.

2. There was a statistically significant difference at the 0.05 level between males and their female peers on moral judgment as measured by the Principled Morality Score.

3. There was a statistically significant difference at the 0.05 level between male athletes when compared with female athletes, male nonathletes, and female nonathletes on moral judgment as measured by the Principled Morality Score.

4. There was a statistically significant difference at the 0.05 level between female athletes when compared with male and female nonathletes on moral judgment as measured by the Principled Morality Score.

Assumptions

The following assumptions were made:

1. The reading level of the Defining Issues Test was twelve to thirteen years or equivalent or ninth grade level (Rest, 1990). It was assumed that all participants in the study had a reading level adequate to comprehend and adequately complete the Defining Issues Test and Biographical Questionnaire.

2. The Defining Issues Test was assumed to be a reliable and valid instrument in assessing moral judgment based on a validation strategy and a treatment of reliability and validity, discussed in terms of
(1) face validity, (2) test-retest reliability, (3) internal consistency, (4) criterion group differences, (5) longitudinal change, (6) convergent-divergent correlations, (7) experimental enhancement, (8) resistance to faking, (9) and internal structure (Rest, 1990). Content validity was established through evaluation by the University of Minnesota at the Center for the study of Ethical Development.

Need for the Study

Research has supported the expectation that intentional examination of ethical and moral issues should permeate college life in order to prepare students to meet social and civic obligations as productive citizens (Boyer, 1987). However, behavioral expectations and administrative responsibility have vacillated from in loco parentis to a kind of consumer advocate.

Alexander Astin’s (1977) longitudinal research on college student characteristics indicated a trend of increasing materialism and hedonism and a corresponding decline in altruism and social consciousness. The result has been a “privatism” or moral passivity in college student values and conduct which run counter to many of the student development outcomes actively promoted by student affairs professionals (Dalton, 1985).

In addition, student athletes have experienced social pressure that may impact their moral judgment. Heinila (1984) suggested that, as team interests increase, moral considerations become less humane.

The Defining Issues Test is an appropriate instrument to determine the level of moral judgment for both student athletes and nonathletes. By comparing student athlete moral judgment with student nonathletes, the anticipated result of the study is the provision of:

1) an understanding of the level of moral reasoning from a sample of students and student athletes attending the University of Nevada, Las Vegas;

2) a comparative analysis of principled reasoning scores from these two populations based on Rest’s Defining Issues Test;
3) a baseline of information on which to initiate educational and programmatic efforts in addressing moral development (Evans, 1987) for students and student athletes attending the University of Nevada, Las Vegas;

4) an understanding of the contribution that collegiate athletic competition makes to a student’s moral development.

**Delimitations**

The investigation had the following factors as delimitations:

1. The study was limited to a sample of matriculated students and student athletes registered as undergraduate students between the ages of 17 and 22 at the University of Nevada, Las Vegas. Therefore, the results were not a representative sampling of the institution and students.

2. In this study of undergraduate students at the University of Nevada, Las Vegas, the "Principled Morality Score" was reported by category of sport, number of seasons of sports participated and gender. Categorization as an athlete was limited to an individual’s participation in the sports selected: women's basketball and softball; men's soccer and baseball.

3. The effects of the intensity of sports experience (noncontact, contact, collision) on moral judgment were not analyzed in this study.

4. Findings described how the particular group of subjects responded to the measurement of their moral reasoning as measured by the Defining Issues Test. No particular generalization, characterization, or inference was made beyond this specific group of undergraduate students from whom the data was collected.

5. The ideology followed was derived only from a review of the work of the major authors of the cognitive-developmental model.

6. The study was quasi-experimental. The design for this study was a 2 (sports participation) X 2 (gender) analysis of variance (ANOVA). Sports participation (athletes and nonathletes), and gender (males and females) were chosen as categorical variables in the statistical design. Moral judgment, as measured by the Principled Morality Index, was the dependent variable.
7. The **Defining Issues Test** was administered to 58 student athletes and nonathletes who volunteered at the end of the 1991-1992 academic year. Thirty-four tests proved valid following the internal validity check as established at the Center for the study of Ethical Development at the University of Minnesota. Data analysis was limited to these responses. No inferences can be made beyond this population or geographic region, because of the limited valid sample size.

**Limitations**

The investigation had the following factors as limitations:

1. A unique situation in the University of Nevada, Las Vegas intercollegiate athletic department unexpectedly limited the sampling of additional athletic programs.

2. There were 41.1% of the **Defining Issues Tests** which failed Rest's (1988) Reliability and Validity construct.

**Method of Research**

The nature of this research was to provide a measure of the effect of sports participation and gender on moral judgment development for student athletes and nonathletes at the University of Nevada, Las Vegas using the **Defining Issues Test**.

Student athletes studied volunteered from men's baseball and soccer and women's basketball and softball intercollegiate teams. The control group studied were students who volunteered from a General Psychology 101 course. All students were administered a Biographical Questionnaire to examine the independent variables of sports participation, gender, and, if athletes, the number of seasons of participation in sports. In addition, participants completed the **Defining Issues Test** to determine the dependent variable, moral judgment, as represented by the Principled Morality Score.

The scores used to report the data, as measured by the **Defining Issues Test**, were evaluated from a sample of 21 undergraduate students as the control group and 37 undergraduate student athletes at the University of Nevada, Las Vegas. Data were collected from this
sample by means of the Defining Issues Test and a Biographical Questionnaire administered to all participants at the end of the 1992 academic year.

The Defining Issues Test provided the Principled Morality Score, the "P" Index, as a quantitative assessment of individual moral judgment. Each test was coded in a manner that identified whether the participant was an athlete or nonathlete and male or female. The Biographical Questionnaire provided additional information on the following variables: age, ethnic origin, religious affiliation, academic level, junior college transfer, number of seasons of intercollegiate athletic participation, participating athletic sport, number of years residing within Nevada, athletic scholarship, number of full-time semesters at the University of Nevada, Las Vegas, Federal financial assistance, and academic major.

The design for this study was a 2 (sports participation) X 2 (gender) analysis of variance (ANOVA). Sports participation (athletes and nonathletes and gender (males and females) were chosen as categorical variables in the statistical design. Moral judgment, as measured by the P Index, was the dependent variable. ANOVA tables for the regressions of the Defining Issues Test scores on athlete status, gender, and athlete by gender interactions resulted in a set of 33 regression analyses. The main effects of sports participation and gender were examined as to their means and variances on the Defining Issues Test moral judgment score, the P Index. Additionally, a stepwise regression and a backward regression on the Defining Issues Test Principled Index was conducted.

Frequency distributions for the variables included in the biographical questionnaire were run to explore additional data beyond the stated hypotheses. Analysis was used for supplementary data to explore how they related to the variance in the moral judgment of intercollegiate athletes at the University of Nevada, Las Vegas.
Definition of the Terms

Terms, words, or phrases as used in this study are defined as follows:

**Moral action**- The correspondence and consistency between moral judgment choice and subsequent behavior (Ignelzi, 1990).

**Moral judgement**- The thought process employed by an individual in evaluating a conflict in terms of right and wrong. Rest (1979) developed the *Defining Issues Test* as a measurement of moral judgment level.

**Nonathletes**- Students who have matriculated at the University of Nevada, Las Vegas in the status of a freshman, sophomore, junior or senior and have not participated in any intercollegiate athletics.

**Principled Morality Score (P Index)**- The score which represents a subject's moral judgment level. It is the weighted sum, converted to a percent, of a subject's raw scores on the *Defining Issues Test* for Stages 5A, 5B, and 6, that is, the postconventional level of moral judgment (see Appendix A). Rest (1986) notes that the Principled Morality Score "locates a subject in terms of a continuous number representing the developmental continuum" (p. 5.1) rather than at a specific stage. Rest (1979) found the Principled Morality Score to be more sensitive to gains in moral thinking at Stages 5A, 5B, and 6 (as opposed to the Kohlbergian stage-type index), that is, subject's increased use of postconventional thinking in making moral decisions. Rest (1979) has found that the Principled Morality Score shows the clearest differentiation in moral judgment among groups of subjects.

**Seasons of Participation**- The number of seasons in which an athlete has participated during the Fall or Spring as an intercollegiate athlete.

**Student Athletes**- Undergraduate male or female students who have matriculated at the University of Nevada, Las Vegas and are participating members of either men's soccer or baseball or women's softball or basketball intercollegiate athletic teams.
Organization of the Study

Chapter 1 presented the background of the problem including the research problem, hypotheses, the research question, the need for the study, delimitations, definition of terms, and the research design overview.

Chapter 2 contains a review of literature to acquaint the reader with existing studies relative to moral reasoning development, student athletes and associated variables. Included in the review of literature, similar studies were examined with which to compare the findings of this study.

Chapter 3 includes an extended research design, a description of the subjects studied, instrumentation, data collection procedures, and statistical significance.

Chapter 4 presents the results of the Defining Issues Test and Biographical Questionnaire, an analysis of the findings, and a discussion of the data.

Chapter 5 summarizes the findings and presented conclusions and recommendations for further research.

The study concluded with the references, appendices, and a bibliography.
CHAPTER 2

CONCEPTUAL BASE

Our collective well-being requires improvement in individual behavior so that far more often we will do what we know to be right. Our institutions then will serve us because we serve them (Drake, 1990).

The purpose of this chapter was to review the conceptual base and the literature pertaining to the theories in moral judgment. The focus of the first section of this chapter dealt with perspectives of moral judgment as a theory followed by a more indepth discussion devoted to the cognitive development theory. The following section of the chapter was devoted to the profession of student affairs and collegiate athletics related to student moral development. The final section discussed gender research as it applied to moral growth. This literature review was intended to establish a foundation for the cognitive development theory and its application to college student moral development.

Theory Development

The cognitive development approach described in research by Kohlberg (1975, 1976) and Rest (1986) were used as the conceptual base for this study. Kohlberg (1975) explained that, this approach was fully stated for the first time by John Dewey, who called it cognitive because it recognized that moral education, like intellectual education, had its basis in stimulating the active thinking of the [student] about moral issues and decisions. It was called developmental because it saw the aims of moral education as movement through moral stages (p. 136).
Within education and sport, according to Weiss & Bredemeier (1990), two major research traditions in moral development were identified. First, there was the "bag of virtues" or internalization approach which viewed moral development as learning socially accepted behaviors through transmitted values. Secondly, the constructivist approach advocated that moral growth occurred as a result of the interaction between developmental capabilities and characteristics of the observer and the environmental experiences that provided information about social reality. Both approaches were based on research designed that considered the structure of moral knowledge and reasoning, testing hypotheses based on theories by Piaget (1965), Kohlberg (1969, 1976, 1981, 1984), Gilligan (1982) and Haan (1977, 1983, 1985).

**Internalization Approach**

There were three classifications within the internalization research: personality characteristics, value orientations and prosocial behaviors (Weiss & Bredemeier, 1990). Personality trait research, as an example, explored the effects of physical education on the cooperation, self-control, and sociability characteristics of children (Blanchard, 1946). Value orientation was illustrated in Webb's (1969) research which purported that attitudes toward sport evolved from a play orientation to a professional orientation. The final emphasis, prosocial behaviors, defined morality in terms of observable behaviors as evidenced in Kleiber and Roberts' (1981) research which investigated the effect of sport competition on social character.

Within the internalization paradigm, there were two perspectives to moral development: the psychological approach and the social learning approach (Bredemeier, 1984b). The earliest comprehensive understanding of the psychological approach to moral development evolved out of Freud's psychoanalytic theory. Superego, the psychoanalytic term for morality, functioned to control primitive and hedonistic impulses in keeping with internalized parental and
societal values. According to Freud, the critical event in children's moral development was the resolution of the oedipal complex (Freud, 1933). This process was associated with a child's identification with the same-sex parent, leading to the internalization of the parent's superego prohibitions and ideals as the child's own. Thus, an individual's moral growth was seen as a process of enculturation or socialization by significant others and institutions (Weiss & Bredemeier, 1990).

The social learning approach viewed moral development as the process by which the child adopted social regulations (Bredemeier, 1984b). Morality was equivalent to social norms and expectations (Weiss & Bredemeier, 1990). The major difference for the social learning theorist was the role of external socializing agents and situations as determining the internalization of moral development. While psychoanalytic theorists highlighted the internal processes tied to the id, ego, and superego, proponents of social learning theory pointed to the role of significant others in transmitting social norms through operant conditioning (Aronfreed, 1968), modeling (Bandura, 1977, 1986, Barrett & Yarrow, 1977, and Liebert, 1973), and reinforcement (Lickona, 1976; Mischel & Moore, 1966). Lickona (1976) provided parallel structured relations between social role-taking and moral judgment.
### Stages

<table>
<thead>
<tr>
<th>Social role-taking stage</th>
<th>Moral judgment stage</th>
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<tbody>
<tr>
<td>Stage 0-egocentric viewpoint</td>
<td>Stage 0-premoral Stage</td>
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<tr>
<td>(Age range 3-6)</td>
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<tr>
<td>Stage 1-social-informational role taking</td>
<td>Stage 1-punishment and obedience orientation</td>
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<td>(Age range 6-8)</td>
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<tr>
<td>Stage 2-self-reflective role taking</td>
<td>Stage 2-instrumental orientation</td>
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<td>(Age range 8-10)</td>
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<tr>
<td>Stage 3-mutual role taking</td>
<td>Stage 3-orientation to maintaining mutual expectations</td>
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<tr>
<td>(Age range 10-12)</td>
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<tr>
<td>Stage 4-social and conventional system role taking</td>
<td>Stage 4-orientation to society's perspective</td>
</tr>
<tr>
<td>(Age range 12-15+)</td>
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</tbody>
</table>

**Note.** Age ranges for all stages represent only an average approximation based on studies to date. From "Social-Cognitive Behavior" by R. L. Selman, 1976, in T. Lickona (ED.), Moral development and behavior (p. 309), New York: Holt, Rinehart & Winston. Copyright 1976 by T. Lickona.

Advocates of the internalization approaches in reference to education saw the role of teacher to explicitly define values and to consistently model and reinforce desired behaviors associated with those values (Weiss & Bredemeier, 1990). "Character development" programs were an outgrowth of this point of view, where the term "character" came to represent culturally valued attributes deemed morally appropriate by society (Peck, 1960).

While individuals who identified character development as an explicit outcome of physical education and sport experiences assumed that it occurred "naturally" or automatically among participants, other social learning research focused on prosocial behaviors (altruism, sharing, cooperation) or value orientations (i.e. understanding character development through professionalization of values), intrigued by the possibility that sport-related contexts were mediums through which character development was influenced (Weiss &
Bredemeier, 1990). In short, in the internalization approach, there was little empirical data and differing opinions about the role of sports and education in moral development.

**Constructivist Approach**

The second fundamental moral development approach was the constructivist approach. Rather than viewing moral development as a process of transmitted principles from one generation to the next through socialization, cognitive developmentalists viewed a moral act as one based on a conscious prior judgment of rightness or wrongness (Grusec & Lytton, 1988). The individual was seen as creating personal moral conceptions about the social world through interactions with others (Weiss & Bredemeier, 1990). Proponents of the constructivist approach of moral development were structural developmental theorists who believed that:

a. underlying the specific content of a person's moral judgments and actions exists a moral reasoning structure and,

b. moral reasoning structure undergoes a regular sequence of transformations as a result of a combination of maturation and environmental experiences. (Weiss, et. al. p. 337).

The originator of structural developmental understanding was Jean Piaget (1932,1965). He established the two-stage model of moral development based upon observations of children as they played marbles and talked with them about their understanding of the rules. He came to identify two broad stages in children's moral development: a heteronomous stage and an autonomous stage (1965). This model moved from an attitude of unilateral respect for adult authority, the heteronomous stage, to relationships of mutual respect among peers, the autonomous stage (Weiss & Bredemeier, 1990).

At the heteronomous stage, children were constrained by adult authority and expressed rigid beliefs that game rules could not be changed and must be followed. At the autonomous stage, an orientation toward cooperation with peers superseded conformity to adult constraints, and rules were viewed as flexible means for cooperative interaction in play (p. 402).
Winkler (1988) summarized Piaget's view of morality as being linked with the cognitive processes "fostered first by parental rules [heteronomous stage] and later by children's growing ability to think and reason for themselves [autonomous stage] about moral issues" (p. A.4). According to Piaget, changes in moral thinking reflected more sophisticated cognitive abilities. As children became less egocentric, they could put themselves in the place of others with the understanding that intentions were important and that one's actions did have an effect on others (Grusec & Lytton, 1988).

Concepts central to Piaget's view included:

1. His interest in peer interaction in its ability to foster cognitive conflict;
2. Peer interaction rather than adult-child interaction, and;
3. Social coordination's ability to cause cognitive development if the consensus that emerged was achieved through a process of active cognitive restructuring by the participants (Dalton, 1985).

Although the assumption that the developmentally mature person was the one who worked toward autonomy had been challenged (Liddell, Halpin & Halpin, 1992), structural or cognitive developmentalists found a striking regularity in the underlying structure of moral reasoning which evolved as an individual developed (Bredemeier, 1984b).

According to the cognitive developmental paradigm, learning and behavior reflected an equilibration between assimilative and accommodative processes (Piaget, 1970). This approach did not see society as defining and dictating the moral. Rather, through interacting with others, moral meaning was constructed. Morality was equivalent to the principles used to make judgments about actions that had an impact on human welfare (Bredemeier, 1984b).

Kohlberg's theory of moral judgment provided the framework for much of the research on the development of moral concepts. Based on Piaget's research, although greatly expanded, Kohlberg defined moral maturity in terms related to abstract ethical principles of justice.
and equality. The major modifications of Piaget's moral stage scheme made in the stages formulated by Kohlberg were: that at the earliest stages (Stages 1 and 2) moral judgments were based not on respect for authority and rules, but on a confusion of morality with power and punishment; that adolescence is characterized by a level of conventional morality (Stages 3 and 4); and that autonomous morality (Stage 5 and 6) was seen as developing during late adolescence or early adulthood (Turiel, 1983).

Lawrence Kohlberg, by far, had the greatest influence on the study of moral development (Kohlberg, 1969, 1976, 1981, 1984). By presenting individuals with stories involving moral conflicts or dilemmas, and asking them to make judgments about why a particular way of solving the dilemma was better, Kohlberg was able to describe developmental changes in how moral issues were viewed (Grusec & Lytton, 1988). Boyd (1989) provided the following fundamental points that formed the core of Kohlberg's empirical theory:

1. The assumption is that the psychological self—the sense of "myself" that all have—is a social construct.
2. Moral evaluations are judgments of the appropriateness of some act or pattern of action that might be performed by a (or any) person insofar as it affects the interests of another person or other persons.
3. Part of what it means to be a person is the effort to be a moral person.
4. The intentionality of morality is assumed and integrated with the developmental nature of the moral person (pp. 100-102).

With these underlying beliefs, Kohlberg hypothesized a six-stage sequence of moral development, seen as invariant and culturally universal (Kohlberg, 1969, 1976, 1981, 1984).
Kohlberg's Stages of Moral Development

Level I: Individuals base their moral judgment on external, quasi-physical acts which determine good or bad with no regard for people or standards. Level I or the Preconventional Level includes Stage 1 and 2:

- At Stage 1, an individual's orientation is punishment and obedience. Individuals functioning in this stage determine right and wrong as that which is dictated by power or authority to avoid punishment.

- At Stage 2, an individual's orientation is naively egotistic. For individuals functioning at this stage, right action becomes that which satisfied one's own needs and occasionally the needs of others.

Level II: Individuals base their moral judgment on a perceived value of maintaining the roles and expectations of society with less regard for personal consequences. Level II or the Conventional Level includes Stage 3 and 4:

- At Stage 3, an individual's orientation is "good boy/good girl." Individuals functioning at this stage exhibit "good" behavior which helps others or will earn him or her approval.

- At Stage 4, an individual's orientation is authority, law, and duty. Individuals functioning at this stage recognize laws and other social institutions and shift toward doing one's duty and abiding by the social order.

Level III: Individuals base their moral judgment on self-determined or principled acts, as dictated by self, which have validity apart from people or standards. Level III or the Postconventional Level includes Stages 5 and 6:

- At Stage 5, an individual's orientation is social contact. Unlike Stage 4 where law and order were absolute, individuals functioning at Stage 5 find laws, which are unconstitutional, violate human rights, or not in the general interest, invalid. Outside the law, free agreement and contract bind an obligation.
At Stage 6, an individual's orientation is universal ethical principles. For individuals functioning at Stage 6, "right" is defined by one's conscience in accordance with one's self-chosen ethical principles. The principles are abstract as well as ethical, that is, the justice principle recognizes the mutual and equal rights of human beings and respect for human beings as individuals.

Two principles, according to Weiss & Bredemeier (1990), characterized Kohlberg's approach to understanding moral development. First, moral growth was believed to occur as a result of personally experiencing a situation where one's reasoning was inadequate, which resulted in an individual's ability to take the role of others. Second, "justice" was identified by Kohlberg as the single moral norm from which all others were derived.

Kohlberg reported (1976) that level 1 was typical of children to about the age of 9, some adolescents, and adult criminal offenders. Level 2 characterized the thinking of adolescents and most adults in the United states as well as other societies, whereas level 3 was typical of a minority of adults (Grusec & Lytoon, 1988). Kohlberg's hypothesized six-stage sequence of moral development reflected a higher level of moral judgment through the increasingly complex ordering and coordinating of moral value. The first two stages characterized an egocentric approach to moral problems, the "pre-conventional" level. The next two stages comprised the "conventional" level, during which time an individual approached problems through the eyes of one's social group or society as a whole. Finally, the "postconventional" level involved an individual who recognized universal values that were not tied to particular societal norms (Weiss & Bredemeier, 1990). Another way of characterizing the differences between levels is that

in pre-conventional morality rules and social expectations are external to the self. In conventional morality, the self has identified with or internalized the rules and expectations of others. And in postconventional morality, the self is differentiated from the rules and expectations of others, and values are defined in terms of self-chosen principles (Grusec & Lytton, 1988, p. 338).
Kohlberg's levels reflected egocentric, societal, and universal or principled perspectives (Bredemeier, 1984b). Additionally, Boyd (1989) points out that the notion of being principled, despite whatever level, did not establish final stopping points, but rather flexible attempts to integrate solutions to difficult problems into coherent patterns. The stages of moral development, as conceived by Kohlberg, were descriptions of a psychological function that persons engaged in to resolve particular aspects of social interaction, not descriptions of the moral persons themselves. Kohlberg argued that logical thinking had priority—advanced moral reasoning was not possible without advanced logical reasoning so that, for example, an individual who had not attained the highest stages of formal operational thinking, could not think at the post-conventional level of morality (Grusec & Lytton, 1988). Thus, learning increased both quantitatively and qualitatively through transformations in the way that material was internally organized (Bredemeier, 1984b). Blasi (1980) reviewed studies which related Kohlberg's stage theory to behavioral phenomena and concluded that there was considerable evidence that the cognitive developmental theory enhanced the understanding of human moral action.

The best known theories of moral development, those of Kohlberg (1969) and Gilligan (1982), focused on moral judgment, the cognitive component of moral behavior (Evans, 1987). In defining morality as an ethic of justice, the nature of moral problems was typically framed as a conflict of the right to property versus the right to life, the right to privacy versus the right to choose. (Liddell, Halpin & Halpin, 1992). Boyd (1989) seemed to counter this narrow interpretation of Kohlberg's moral orientation. He argued that the normative core of Kohlberg's theory was properly located in the notion of respect for persons which necessitated justice as one dimension. Kohlberg studied moral development by analyzing responses to moral dilemmas as well as the reasoning given for the moral judgment. The structure of the moral judgment was defined by the reasoning patterns that lead to choosing one alternative over others; what elements, norms, and issues which were considered in reaching a solution to the
conflict (Zimmerman, 1991). In short, Kohlberg argued that justice was not a rule, but a principle, and that a principle was guided by choosing desirable behavior. Therefore, there may be exceptions to rules but not exceptions to principles. (Grusec & Kytton, 1988).

While Kohlberg perceived morality as centering around concepts of justice, Gilligan (1982) suggested that care and responsibility were more important in moral decision making, at least for women (p. 191). Gilligan developed an alternative to Kohlberg's model that highlighted a feminine expression to the construction and resolution of moral problems (Weiss & Bredemeier, 1990). Gilligan's work was rooted in the theory that women conceptualized the world differently from men (Liddell, Halpin and Halpin, 1992).

In contrast to Kohlberg's principle of justice, Gilligan discovered that women employed principles of responsibility and care to guide postconventional reasoning (Weiss & Bredemeier, 1990). She claimed that "two moralities" existed; one in which intimacy and relationships valued care and responsibility, and a second morality that valued the justice orientation.

Kohlbergians argued that Gilligan's findings reflected, instead, two kinds of moral judgments. Moral dilemmas that were abstract judgments of "rightness" derived from rules or principles which were called "deontic judgments" and moral dilemmas that affirmed the will to actually act in terms of moral judgment were called "judgments of responsibility" (Higgins, Power & Kohlberg, 1984, Kohlberg & Candee, 1984, & Nunner-Winkler, 1984). In either construct, the relationship between judgment and action were supported by the tendency toward self-consistency (Weiss & Bredemeier, 1990). The following chart (Brabeck, 1983, p. 278) provided a frame of reference when Gilligan and Kohlberg's constructs were compared:
## Comparison of Gilligan's Morality of Care and Responsibility and Kohlberg's Morality of Justice

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<thead>
<tr>
<th></th>
<th>Morality of care &amp; responsibility</th>
<th>Morality of justice</th>
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<tbody>
<tr>
<td>Gilligan</td>
<td>Kohlberg</td>
<td></td>
</tr>
<tr>
<td><strong>Primary Moral Imperative</strong></td>
<td>Nonviolence/care</td>
<td>Justice</td>
</tr>
<tr>
<td>Components of Morality</td>
<td>Relationships</td>
<td>Sanctity of individual</td>
</tr>
<tr>
<td></td>
<td>Responsibility for self and other</td>
<td>Right of self and others</td>
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<tr>
<td></td>
<td>Care</td>
<td>Fairness</td>
</tr>
<tr>
<td></td>
<td>Harmony</td>
<td>Reciprocity</td>
</tr>
<tr>
<td></td>
<td>Compass</td>
<td>Respect</td>
</tr>
<tr>
<td></td>
<td>Selfishness/self-sacrifice</td>
<td>Rules/legalities</td>
</tr>
<tr>
<td><strong>Nature of Moral Dilemmas</strong></td>
<td>Threats to harmony and relationships</td>
<td>Conflicting rights</td>
</tr>
<tr>
<td><strong>Determinants of Moral Obligation</strong></td>
<td>Relationships</td>
<td>Principles</td>
</tr>
<tr>
<td><strong>Cognitive Processes for Resolving dilemmas</strong></td>
<td>Inductive thinking</td>
<td>Formal/logical-deductive thinking</td>
</tr>
<tr>
<td><strong>View of Self as Moral Agent</strong></td>
<td>Connected, attached</td>
<td>Separate, individual</td>
</tr>
<tr>
<td><strong>Role of Affect</strong></td>
<td>Motivates care, compassion</td>
<td>Not a component</td>
</tr>
<tr>
<td><strong>Philosophical Orientation</strong></td>
<td>Phenomenological (contextual relativism)</td>
<td>Rational (universal principle of justice)</td>
</tr>
<tr>
<td><strong>Stages</strong></td>
<td>I. Individual Survival I. Punishment &amp; Obedience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IA. From Selfishness to Responsibility</td>
<td>II. Instrumental Exchange</td>
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<td></td>
<td>II. Self Sacrifice &amp; Social Conformity</td>
<td>III. Interpersonal Conformity</td>
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<tr>
<td></td>
<td>IIA. From Goodness to Truth</td>
<td>IV. Social System &amp; Conscience Maintenance</td>
</tr>
<tr>
<td></td>
<td>III. Morality of Nonviolence</td>
<td>V. Prior Right and Social Contract</td>
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<tr>
<td></td>
<td></td>
<td>VI. Universal Ethical Principles</td>
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</table>
Despite differences, both Kohlberg and Gilligan developed a hierarchy in which lower levels of moral reasoning centered around individual desires, middle stages were based on societal norms, and higher stages focused on universal ethical principles. Gilligan (1982) described moral development in college students as a "shift from moral ideology to ethical responsibility" (p. 155).

Although Kohlberg and Gilligan were common names in reference to the study of moral development, Norma Haan's interactional model was the dominant one for exploring moral development in sport (Weiss & Bredemeier, 1990). Haan hypothesized that morality was interpersonally constructed during the processes of social living (Haan, 1977, 1983, 1985). She investigated people's interactive behavior in everyday life situations and game simulations. Three major concepts provided the foundation for Haan's model: moral balance, moral dialogue and moral levels (Weiss & Bredemeier, 1990). Comparable to Kohlberg's principle of disequilibrium, Haan described moral life as a continuous process or fluctuation of moral balances and imbalances. Through moral dialogue, strategies were continuous in establishing and reestablishing moral balance. Haan developed five moral levels to define the development of moral maturity. Haan's model featured both moral structures and ego processes. She reasoned that if defense mechanisms were processes that lead to reality distortion, then there were corresponding "coping" mechanisms that lead to accurate perception. She identified 10 pairs of coping and defining ego processes (Haan, 1977, 1985).

Since this study examined moral development of athletes as compared to nonathletes, following were sport illustrations interpreted for each level or stage for the major cognitive developmental theorists, Gilligan, Haan and Kohlberg:
Gilligan's Moral Levels with Sports Illustrations

Level 1: Self-orientation. At the first level, the individual's moral concern is focused primarily on the needs and desires of the self. Survival and self-protection are dominant themes.

Illustration: A basketball coach tells a recruiter from a competing institution that she is not interested in a particular athlete when in reality she has been recruiting her heavily. The coach feels justified in the deception because her job security depends upon coaching success.

Transition: From selfishness to responsibility. During the transition from the first to second level, selfishness versus responsibility becomes a focal problem. The issue is one of attachment or connection to others. The person's understanding of self-interest broadens in a way that allows for an integration of responsibility and care.

Illustration: In a one-sided basketball contest, the high-scoring center begins to pass frequently to her less-experienced forward to give her an opportunity to gain experience and recognition. She does this because she feels she's been selfish in shooting so frequently.

Level 2: Goodness as self-sacrifice. Whereas the first level morality is seen as a matter of sanction imposed by a society in which one is more subject than citizen, at the second level moral judgment comes to rely on shared norms and expectations. Here the conventional feminine voice emerges with great clarity, defining the self and proclaiming one's worth on the basis of the ability to care for and protect others. The strength of this position lies in its capability for caring: its limitation is the restriction it imposes on direct expression.

Illustration: In a close softball game an injured player risks more serious injury by returning to the game when the coach asks her to go to at. The player does not want to let down the other players or the coach.
Transition: *From goodness to truth.* The second transition begins with the reconsideration of the relationship between self and other, as the women starts to scrutinize the logic of self-sacrifice in the service of a morality of care. The issue of selfishness reappears; the person wonders whether responsibility should include care of the self. To make the transition to the postconventional level, the individual must carefully distinguish between personal needs and views from those of others. The criterion for judgment thus shifts from "goodness" to "truth" as the morality of action comes to be assessed not on the basis of its appearance in the eyes of others, but in terms of the realities of its intention and consequence.

Illustration: A scholarship athlete decides to stop participating in extra practices for gymnastic competition even though it has been paying off in improved performance. She has decided that her participation in gymnastics has largely been to win approval from others and she would prefer to use the time to improve her grades.

**Level 3:** *The morality of nonviolence.* By elevating nonviolence—the injunction against hurting—to a principle governing all moral judgment and action, one is able to assert a moral equality between self and others. Care then becomes a universal obligation and the basis for a positive assertion of responsibility.

Illustration: A swimmer in a water polo match refuses orders to deliberately aim her goal shot at the goalie's head. She reasons that all people are entitled to a life free from deliberate harm and that she is entitled to play free from the fear of possible retaliation.

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Moral level and stage typing is a difficult and involved process. While these illustrations are typical of the level indicated, no claim is made that the information provided is adequate for definitive moral scoring (Weiss & Bredemeier, 1990, p. 341).
Haan's Moral Levels with Sports Illustrations

Level 1: At this level there is no real view of moral interchange between people. The moral balance is seen as an exchange of power: the person of greater power thwarts the person of lesser power. All are entitled to what they can get.

Illustration: An athlete is ordered to the showers by an angry umpire.

Level 2: Balances at this level are established by the self-making trade-offs to get what is desired. It is assumed that the self and others want similar things and that others, like the self, are after their own benefit.

Illustration: A football lineman intentionally injures another player because "that's just the way the game is played."

Level 3: The person now thinks of herself or himself as part of a human collectivity. This appreciation for social existence leads to the assumption that everyone recognizes the need for good faith and moral responsibility. The person naively assumes others will behave morally and so tries to create moral balance that consist of harmonious exchanges of good.

Illustration: A shot-putter fails to call the official's attention to a shot that has not been weighted-in because she assumes that no one would try to cheat.

Level 4: The naive assumptions of Level 3 inevitably result in disappointment and harm to the self. The person reasoning at Level 4 structures the moral balance through attempts to regulate it with external impartial formulations that assign everyone the same rights or duties. It is thought that the "common interest" of all is best secured by submitting to external regulation, or systematized structured exchange.
Illustration: A new curfew rule is strictly enforced—no exceptions—because it is in the best interest of the whole team that everyone get a good nights sleep.

Level 5: At the final level, the individuality of persons and the complexity of social life are given full consideration. The external regulation of the "common interest" is abandoned in favor of situationally specific balances that optimize the potential of all parties in a manner consistent with the particular context. All interests are taken into account and coordinated in a way that is mindful of the participants' future lives together.

Illustration: A coach plans a heavy and strenuous workout for her team in preparation for an important game, but after a team discussion, excuses one of her star players from part of the practice because the player needs to study for a final exam.

Moral level and stage typing is difficult and involved process. While these illustrations were typical of the level indicated, no claim was made that the information provided was adequate for definitive moral scoring (Weiss & Bredemeier, 1990, p. 343).
Kohlberg's Moral Stages with Sport & Life Illustrations

Level I: Preconventional Morality
Stage 1: Obedience and Punishment
Life: "I wouldn't have done it if I'd known I would be punished."
Sport: When asked whether a pitcher should use an illegal pitch one player reasons, "No, it's wrong; it can get the pitcher expelled from the game."

Stage 2: Relative Hedonism
Life: "We all agreed that we wanted to have a kegger in our suite, so we had a party without registering it."
Sport: Two runners making a deal to each false-start twice in an attempt to tire out a third competitor.

Level II: Conventional Morality
Stage 3: Good Boy/Good Girl Orientation
Life: "My family always wanted me to graduate from college. I cheated on the exam so I wouldn't flunk out and disappoint them."
Sport: The coach of a football team that is far ahead in the third quarter of a game would remove his best players since that is appropriate sportspersonlike behavior.

Stage 4: Maintenance of Social Order and Authority
Life: "I turned them in because student government would become broke if everyone could embezzle funds."
Sport: A boxer who refuses to throw any kidney punches, even though he is sure he could get away with it, because one ought to fight by the rules.
Level III: Postconventional Morality

Stage 5: Democratically Accepted Law
Life: "Allocation of student fees is unfair. That's why we are organizing this petition drive for a constitution revision."
Sport: When certain "legal" drugs are being used to improve athletic performance, a group of athletes attempt to change the rules so that the use of those drugs will be forbidden. The athletes reason that drug use violates the spirit of the game and is not in keeping with their rights as individuals.

Stage 6: Universal Principles
Life: "Creating a public disturbance is against the law, but supporting apartheid violates human dignity and I must make a stand for what is more important."
Sport: In a very close gymnastics meet the leading gymnast on the losing team decides to attempt a routine he has been working on but has not yet done without safety apparatus. But the judge refuses to allow the performance, reasoning that all persons have an unforfeitable right to life and safety, and that forfeiting basic human rights cannot be justified by an appeal to lesser goods associated with athletic victory.
(Life Illustrations, Boots, 1987; Sport Illustrations, Bredemeier, 1984).

There was criticism of the cognitive development conceptualization of morality as the internalization of society's standards of conduct. Nevertheless, moral development was regarded as a fundamentally rational process, based on an understanding of and appreciation for social perspectives and logical analysis. Similarly, the process of college education tended to be more rational than emotional (Sapp, 1986).
A major obstacle in attempting to assess the moral orientation of college students and its relationship to other variables is that there was not a successful attempt to integrate these theories into one instrument that could objectively measure an individual's preference for either the care orientation or the justice orientation, or both (Liddell, Halpin & Halpin, 1992).

James Rest (1979, 1988) adapted Kohlberg's theory to an objective measurement tool, the Defining Issues Test, which investigated moral judgment by examining the choices an individual made in solving a series of moral dilemmas. Rest (1984) based the Defining Issues Test on his proposed four-component interactive model of moral functioning:

**JAMES REST'S MAJOR COMPONENTS OF MORALITY**

**Component 1: Interpretation of the situation**

Major function of the process: To interpret the situation in terms of how one's actions affect the welfare of others.

Factors that influence the process: Ambiguity of people's needs, intentions and actions; familiarity with the situation and the people in it; time allowed for interpretation; sheer number of elements in the situation and the embeddedness of crucial cues; degree of personal danger and susceptibility to pressure; complexity in tracing out cause-effect chains.

**Component 2: Formulating a plan of action**

Major function of the process: To formulate a moral course of action; to identify the moral ideal in a specific situation.

Factors that influence the process: Factors affecting the application of social norms or moral ideals; delegation of responsibility to others; prior conditions or expectancies that affect role responsibilities and reciprocity; the combination of moral issues involved; prior commitments to some ideology.
Component 3: Deciding what to actually do

Major function of the process: To select among competing value outcomes of ideals the one to act on; deciding whether or not to fulfill one's moral idea.

Factors that influence the process: Motivations other than moral ones; mood states that affect decision-making; estimating costs and benefits; estimates of the probability of certain outcomes; factors that affect one's self-esteem.

Component 4: Implementing a moral plan of action

Major function of the process: To execute and implement what one intends to do.

Factors that influence the process: Physical barriers to executing the moral plan of action; distractions or fatigue; cognitive transformations of the goal; timing difficulties in managing more than one plan at a time (Rest, 1984)

The first component, interpreting the situation and identifying a moral problem, which involved imagining possible courses of action in a situation and considering how the consequences of those actions would impact on all parties who were in the situation. The second component, formulating a plan of action that applied the most relevant moral standard or idea—making a judgment about what ought to be done in a particular situation. The third component, deciding what one actually intended to do by selecting among competing values, involved value integration and moral motivation. The last component, executing and implementing the moral plan of action, involved ego strength and self-regulation skills. Rest contended that the production of moral behavior required these four interacting component processes and that deficiencies in any component could result in a failure to act morally. Rest's model offered an approach to organizing research on moral development in sport (Weiss & Bredemeier, 1990, pp. 350-351).
This study followed the cognitive development foundation by administering the Defining Issues Test in order to assess how a sample of undergraduate student athletes and nonathletes, at the University of Nevada, Las Vegas, used different considerations in making sense of moral situations. The specific model used in the conceptualization of moral functioning was derived by James Rest (1984).

A basic tenent of cognitive developmental theory, according to Rest, (1986) was that people operated on their experiences in order to make sense of them, and that experiences changed the basic conceptual structures by which people constructed meanings. He concluded that the people who developed in moral judgment were those who loved to learn, who sought new challenges, who enjoyed intellectually stimulating environments, who were reflective, who made plans and set goals, who took risks, who saw themselves in the larger social contexts of history and institutions and broad cultural trends, [and] who took responsibility for themselves and their environs (p. 177).

LITERATURE REVIEW

Student Affairs Considerations

Attention to the moral and religious values of students was a stated goal of the first colleges and universities in the United States (Brubacher & Rudy, 1976). Although the relationship between student and institution changed from that of parent to clinician (Boyer, 1987), the mission statements of most colleges and universities advocated the development of values and ethical behavior as an important educational goal (Dalton, 1985). The student affairs profession, from its origin in the nineteenth century, represented a commitment to ethical development and personalization of the educational experience for students (Sandeen, 1985).

The mission statement at the University of Nevada, Las Vegas which was approved by the Board of Regents on September 7, 1989, stated that "the University required a high level of ethical standards. . ."
[that] provided a liberal education that emphasizes the usefulness of understanding all aspects of our world. . . to live intelligently and responsibly as citizens of our democratic society" (UNLV Self-Study Report, 1990, p. 7). Even though the mission statements of most institutions still included the development of students' ethical standards as an educational goal, many colleges and universities took a neutral position concerning traditional values in recent years, including taking a laissez-faire attitude toward students' moral development (Kibler, 1992).

However, there existed a particular mission for student affairs professionals who had a primary responsibility to assist students in their personal growth, development and education (Hanson, 1982). This development was defined as the mastery of increasingly complex developmental tasks and the achievement of self-direction and interdependence to give it directionality (Miller & Prince, 1976).

The role of student affairs professionals in the moral development of students was critical. Blimling (1990) makes the conjecture that college students who made principled decisions were possibly perceived as though they lacked character when, more accurately, they were in the process of developing it. Identity development and moral development were related (Waterman, 1982).

Gilligan & Murphy (1979) echoed Blimling in terms of "relativism," a result and reflection of the adolescent's struggle with the inevitable conflicts of human experience. Kohlberg and Kramer (1969) found that 20% of adolescents regressed in moral maturity scores, yet returned to principled stages by age 25. Brabec (1983) noted that Gilligan purports that this relativism was the result of confronting the problem of moral choice. Therefore, the college years were a critical period in which students developed an understanding of what was right and attempted to integrate it into how they viewed themselves in the adult world (Blimling, 1990).

From the cognitive developmental position, Sapp (1986) stated that "morality and moral development were essentially a process of changes in conceptions of justice, fairness, etc. rather than just or fair behaviors themselves" (p. 75). Although change was expected, Rest
(1979) also concluded that changes in moral judgment occurred slowly because basic reorganizations in thinking patterns were involved (Hanson, 1982).

Student affairs professionals, because of their unique roles in the lives of students, had an obligation to see that attention was given to moral and ethical issues in the environment in which students interacted (Evans, 1987). By stimulating students' intellectual, moral and emotional growth, skills would become grounded in a more mature, humane framework of value (Keniston & Gerzon, 1972).

There were small but consistent gains by student personnel administrators by using structured intervention programs (Blasi, 1980). Kohlberg (1973) suggested for movement in the college years (from conventional reasoning to principled reasoning) the personal experience of choice that involved both questioning and commitment resulting from reflective thinking about moral issues was necessary. Moral growth, for Kohlberg, was a result for "cognitive disequilibrium" (Bredemeier, 1984b). Therefore, the student personnel administrator was a valuable role in creating moral developmental opportunities.

**Intercollegiate Athletic Considerations**

The assumed positive relationship between participation in sport and development of moral values had its origin from the English public schools of the 19th century (Arnold, 1986). He suggested that there were two hypothesis: In one respect, it was hypothesized that sport-moral values such as honesty, generosity and courage were directly connected to educational usefulness. In another respect, it was presumed that moral training on the playing fields generalized to life skills.

During the period of time when sport emerged, Wiggins (1987) acknowledged a connection to the YMCA Christianity movement and the influential leadership from Luther Gulick in promoting the contribution of sport to the harmonious development of mind, body, and spirit.
The value orientation or internalization approach to research into moral development in sport "provided limited insight to the moral growth-sport relationship" (Weiss & Bredemeier, 1990). Additionally, value orientation studies suffered from a superficial conceptualization of morality, and relied on self-reported measures of sportspersonship without contextual or measurement validation (Knoppers, Zuidema & Meyer, 1989). The dilemma of studying the effect of sport on the individual when using the "bag of virtues" approach provided little understanding of the nature of moral development and moral thinking (Porter and Taylor, 1972).

In contrast, the constructivist approach provided new paradigms for studying morality in sport and physical education, offering a definition of morality and testable hypotheses (Weiss & Bredemeier, 1990). The possibility that sport elicited different patterns of moral reasoning from general life situations was investigated both by Hall (1981) and by Bredemeir and Shields (1984). Sport had been described as a unique moral context encouraging adaptations in participants' moral reasoning (Bredemeir & Shields, 1986). However, Bredemeir and Shields (1984) concluded that it was difficult for participants to appeal to a morality of universal human rights in the realm of sport. Yet, because athletic aggression impacted on the rights and well-being of others, the moral development of the athlete was a relevant factor to consider (Bredemeir & Shields, 1984).

There was little empirical study of moral growth associated with sport participation. Inversely, there was limited evidence that collegiate sport participation was associated with lower moral maturity (Bredemeier & Shields, 1986). Only over the last decade was empirical research studies of moral development in sport evident and this literature was primarily focused on theoretical issues and descriptive data (Weiss & Bredemeier, 1990). Three main reasons were cited by Weiss & Bredemeier (1990) for lack of moral development literature in sport:

First, the development of theoretical models of morality, particularly structural-developmental or constructivist approaches, were relatively recent. Additionally, the belief that morality was a
personal or philosophic concern had negative impacts on moral development research within athletics.

Secondly, there was skepticism whether moral development curricula within sport could actually make a difference as well as whether the role of teacher or coach should appropriately take on the role of enhancing participants' moral growth. Weiss & Bredemeier's research found that the topic of moral development was often "hidden" as social development objectives within physical education curriculum. While it was not appropriate for many educators to address moral development, it was entirely appropriate to address social development. Both arenas dealt with "respect for self and others, sense of fair play, appreciation of individual differences, cooperation, controlling aggression and resolving conflicts" (p. 332). In like manner, sport practitioners were less likely to recognize the application of moral development content.

Finally, as a result of little research on moral development in sport and related ambivalence about the topic, the topic of sport morality was neglected and perpetuated (Weiss & Bredemeier, 1990). Still, sport advocates frequently affirmed that participation in sport provided opportunity for moral growth, or in common terminology--"sport built character" (Bredemeier, 1984b). When structured purposefully and guided by sound educational principles, Weiss and Bredemeier (1990) stated that sport could build character and develop a sound mind in a sound body. In Edwards' (1973) review of basic themes analyzed by researchers interested in the effect of sport participation on the social development of athletes, he found:

(a) sport participation builds character—Inconclusive
(b) sport participation develops a value orientation towards loyalty—
No Evidence
(c) sport participation generates altruism—Inconclusive
(d) sport participation generates a value orientation toward social and/or self-control—Inconclusive; and
(e) sport provides opportunities for individual advancement—
Inconclusive (from Hall, 1986).
Goffman's research (1974) referred to entry into college athletics as a stripping down and rebuilding process. Adler and Adler's (1988) research supported a resocialization for athletes, which resulted in an intense loyalty and goal alignment. As one player explained,

winning is as important to me as it is to him [the coach]. To me, if you're a winner, you're gonna develop your skills, you're gonna get seen nationally and develop a national rep so you can get high in the draft, get an education, get a social life, meet people--like boosters for getting a job--'cause all those things go with winning (p. 412).

In another perspective, Hughes & Coakley (1991) found

that a significant portion of deviance among athletes . . . was grounded in athlete's uncritical acceptance of a commitment to what they have been told by important people in their lives ever since they began participating in competitive programs; in a real sense, it was the result of being too committed to the goals and norms of sport (p. 308).

Although many concluded that deviance in sport was proof that the moral basis of society had eroded, they advocated that overconformity to the norms and values embodied in sport itself was the real problem that must be addressed.

Bredemeier and Shields (1986) suggested that sport elicited different patterns of moral reasoning from general life situations. Student athletes, according to Bausell, (1991) reflected a significantly different level of moral reasoning from students who were not athletes. Bausell's research, grounded in Haan's (1978, 1983) interactional model of moral development, (Bredemeier and Shields, 1983 and Bredemeier, 1983), revealed that reasoning about moral issues was significantly higher for nonathletes than for athletes. Bredemeier and Shields (1986) concluded that participation in collegiate basketball was associated with lower level moral reasoning in both sport and life. Yet, no significant differences in moral reasoning were found for high school age athletes and nonathletes for either life or sport scores.
In a separate study, Bredemeier and Shields (1984a) used Rest's *Defining Issues Test* and found that collegiate athletes also scored at a lower moral judgment level when compared with Rest's and Kohlberg's norms for college students. They summarized from their study that "cognitive developmental analysis of the internal structuring of moral meaning by athletes significantly contributes to understanding sport aggression" (p. 146).

Several studies have employed intervention strategies in order to observe changes in moral reasoning and/or behaviors in children within sport settings (Bredemeier, Weiss & Shields, 1986, DeBusk, 1989, Romance, Weiss & Bockoven, 1986). Using a constructivist approach, there was moderate progress in moral reasoning levels. The importance of these studies was the development of new paradigms employing a constructivist approach for studying morality in sport and physical education (Weiss & Bredemeier, 1990) rather than specific findings. Morality was defined and testable hypotheses based on several constructivist theories were tested.

The internalization approach had put an emphasis on identifying and reinforcing selected values. In contrast, the constructivist approach had put an emphasis on engaging [students] in activities and discussion that challenged them to think autonomously about resolutions to moral issues (Weiss & Bredemeier, 1990). In Hall's research, she rejected the internalization approach in favor of the "establishment of a base of knowledge which was developmental and general and may explain behavior in terms of cognitive development of the individual" (p. 192), the cognitive development approach.

**Gender Considerations**

The psychoanalytic approach postulated that women showed less sense of justice than men do because of women's less intense parental identification process. Brabec (1983) cited Freud's characterization of women to men's moral differences:
For women the level of what is ethically normal was different from what it was in men. Their superego was never so inexorable, so impersonal, so independent of its emotional origins. . . they showed less sense of justice, less readiness to submit to the great exigencies of life, and they were more often influenced in their judgements by feelings of affection or hostility (1961/1925, pp. 257-258).

The social learning approach included those opinions that contended that female morality was less developed than male morality as well as theorists that advocated the opposite position, suggesting that females had stronger moral values (Bredemeier, 1984b).

Finally, the cognitive development paradigm had developed into two major directions, both with gender bias. On one hand, Kohlberg's orientation was that of justice. According to Kohlberg, justice was the key to morality (Bredemeier, 1984b). Kohlberg and Kramer (1969) reported the mean stage for men (Stage 4, Law and Order) differed from that of women (Stage 3, Interpersonal Concordance), and on the basis of one study, speculated that this developmental lag may have been due to different role-taking opportunities (Brabeck, 1983). Holstein's study also found gender differences using Kohlberg's model of moral development (cited in Bredemeier, 1984b). He found researchers using Kohlberg's model resulted in a tendency for males to score predominantly at Stage 4 while a disproportionately high number of women scored at Stage 3.

On the other hand, Gilligan's research (1982) advocated that while morality for men was defined as reasoning in accordance with the principle of justice, women tended to judge themselves according to a standard of responsibility and care. Gilligan contended that women's moral reasoning was guided by the principle of nonviolence, a principle as flexible and differentiated as Kohlberg's justice principle (Bredemeier, 1984b). In fact, Gilligan stated, "the very traits that had traditionally defined the 'goodness' of women, their care for and sensitivity to the needs of others, were those that marked them as deficient in moral development" (Gilligan, p. 484). The dilemma for
women arose, according to Gilligan, from conflicting responsibilities rather than from competing rights (1979). Yet, she also stated that these concerns for others were derived from "principles of justice rather than from compassion and care" (Gilligan, p. 484).

Brabeck (1983) summarized the difference between Gilligan and Kohlberg in that,

Gilligan had described a morality of responsibility based on a concept of harmony and nonviolence and a recognition of the need for compassion and care for self and others. This was in contrast to Kohlberg's morality of justice which was based on a concept of reciprocity and fairness and a recognition that one must respect the rights of others as well as one's own (p. 277).

The structural development concept presented by Gilligan's research was drastically different in gender difference in moral development. Gilligan's original research involved interviewing 29 women who were facing a decision about whether or not to have an abortion. Brabeck (1983) noted that "aside from the obvious problem of drawing conclusions about sex differences from the all-female sample of the abortion study, Gilligan's research also suffered the problems of any interview technique" (p. 279).

Gilligan (1982) attributed women's deference to social subordination as a substance of moral concern when she said,

sensitivity to the needs of others and the assumption of responsibility for taking care lead women to attend to voices other than their own and to include in their judgment other points of view (p. 16).

Gilligan (1982) studied the moral language of females and males and found that females were more likely to use a language of care and responsibility in solving moral dilemmas and that males tended toward a language of rights and justice. She contended that "the logic underlying this ethic of care was a psychological logic of relationships, which contrasted with the formal logic of fairness" (p. 73).
Gilligan's basic argument claimed that Kohlberg's theory was gender biased, citing Holstein's (1976) longitudinal study which reported that Kohlberg's scoring standard was gender biased because he had used an original all-male sample. However, Turiel (1976) reported in a test of gender differences in moral reasoning that overall, no statistically significant differences between the sexes were found in moral reasoning scores. Haan, Smith, and Block (1968) reported 41% of the females in their sample were at Stage 3 and 39% at Stage 4, while 22% males were at Stage 3 and 43% at Stage 4. There were several studies that found differences between gender in moral judgment interview scores. Females seemed to be advanced in the early years (Turiel, 1976) and males in late adolescent and adult years (Haan, Langer & Kohlberg, 1976).

However, other studies counter these differences. Brabeck, (1983) cited Weisbrodt, (1970) and college student studies (Arbuthnot, 1975; Fromming, 1978) which revealed no significant differences between the sexes, while Blatt & Kohlberg, 1975, reported female adolescents at the higher stages more frequently than men (p. 282). Additionally, there were several publications which countered Gilligan's premise that justice-oriented scoring systems downgraded women (Walker, 1985; Snarey, Reimer, and Kohlberg 1985; Gibbs and Widaman, 1982; Nisan and Kohlberg, 1982).

The widely shared belief had been that women tended to fixate at Stage 3 with its orientation to the approval and feelings of others, whereas men progressed to Stage 4, which emphasized the maintenance of social order (Grusec & Lytton, 1988). However, Walker (1984) reviewed 77 published papers providing data pertinent to the issue of sex differences in moral reasoning, and concluded that there was no consistent evidence for their existence. Thus, the belief that women were less morally advanced than men, or that they were treated improperly in the Kohlbergian scheme, appeared unjustified (Grusec & Lytton, 1988).
Gender differences when applying the Defining Issues Test were explored. Although this test followed Kohlberg's theoretical structure, the method in which it evaluated moral development was an objective measure of Kohlberg's stages to measure moral reasoning. A potential gender bias by both Kohlberg and Rest involved the characters in their story dilemmas as being all male. Possibly, "it may be that females, when they scored lower than males, did so because they did not identify with the male protagonist" (Brabeck, 1983, p. 283). Garwood, Levine, and Ewing (1980) and Orchowsky and Jenkins (1979) independently investigated the impact of the sex of the protagonist in Defining Issue Test scores. They did not find any support of sex bias in the instruments that measured moral reasoning (Brabeck, 1983). Rest (1979) reviewed 22 studies that assessed gender differences using the Defining Issues Test. Of these, only two studies reported a significant correlation (r=.25, p<.03; r=.25, p<01). In both studies, females scored higher than males. Rest stated that "sex differences were rarely significant in junior high, senior high, college, and graduate studies or adults" (p. 120). Brabeck cited additional published studies (Connolly & McCarrey, 1978; Prawat, 1976) which also supported Rest's claim.

Thoma (1984) applied both meta and secondary analyses procedures to a representative sample of 56 Defining Issues Test studies and over 6,000 subjects. His findings indicated that gender differences favored females—that is, that females actually scored higher on the Defining Issues Test than males (Rest, 1986). The 1986 norms established by Thoma (in Rest, 1986, p. 115) for college subjects based on thousands of subjects and hundreds of studies provided a Principled Morality Score of 45.9 for women and 44.1 for men. According to Rest (1986), "sex difference on the Defining Issues Test were trivial" (p. 113).

Given these considerations, sex differences were rare in the moral development literature (Rest, 1979), particularly in using Rest's objective measure of moral judgment (Brabeck, 1983).

In the sport moral literature, however, both Hall (1981) and Bredemeier & Shields (1984) found that female athletes scored higher than their male counterparts in measures of general moral maturity. In a pilot study, Bredemeier & Shields (1984) employed Rest's Defining Issues Test (1979) in order to focus on the relationship between
aggressive behavior tendencies and moral reasoning in collegiate male and female basketball players. Although gender differences in moral stage scores were not hypothesized, the findings resulted in females scoring higher than males on principled reasoning.

Crow and Heatherington (1989) found that women regarded moral reasoning and judgment decisions in competitive athletic encounters as entailing "moral" considerations whereas men did not. Ryan (1990) found that females who had no high school athletic experience accepted more acts of aggressive sports behavior as legitimate than did those same females after a season of sports participation or the females who had previously participated on a high school team. Silva (1983) noted that gender did have a significant influence on the perception of aggressive sports behavior and its legitimacy between males and females. Hall (1981, 1986) attributed the difference in perceptions of the athletic environment for males and females as virtually two different cultures between genders. Yet, because of the difference in moral development scores as females became involved in collegiate athletics, Bredemeier (1984) hypothesized that, "although for many the hope had been that women would transform the value orientation of contemporary sport, it may be that sport [has] a particularly detrimental impact on the moral development of its female participants" (p. 412).

The studies on moral judgment, attitudes toward aggressive sports behavior, and aggressive actions in sports revealed similar patterns. Increased athletic involvement for males seemed to have a negative effect on moral judgment, moral attitudes, and moral behavior. For females, though, athletic involvement seemed to have a positive effect on these aspects of their moral development until the involvement was at the collegiate level (Zimmerman, 1991). Bredemeier & Shields (1986) concluded that sport experience may provide more beneficial moral stimulation for females than for males, or, alternately, that the possible detrimental dimensions of sport participation were less pronounced in women's sports programs.
Summary

Through this review of literature, the cognitive development (constructivist) theory was selected as the appropriate approach to apply in assessing moral development of collegiate students. The value orientation approach provided limited insight to the moral growth-sport participation relationship (Weiss & Bredemeier, 1990). Constructivist studies were more aligned with the philosophy of student affairs and higher education, encouraging interaction and involvement in order to stimulate growth. Intercollegiate athletic involvement and gender were factors which were explored in their possible impact on moral development.

Although the relationship between the student and the institution had changed over the years, student affairs professionals had always been philosophically involved with the development of student moral judgment. Therefore, it was appropriate that athletic involvement and gender were considered in assessing moral development through application of Rest's (1979, 1988) Defining Issues Test.

Blimling (1990) asked the question, "If higher stages of moral development [were] likely to result in behaviors more honest and altruistic, should not the college experience include efforts to facilitate this development?" (p. 270). The intent of this literature review was to establish an understanding of moral development of students and student athletes at the University of Nevada, Las Vegas for the purpose of validating efforts to foster moral development.
CHAPTER 3

METHOD AND MATERIALS

The purpose of this chapter is to describe the research methodology, data collection technique and statistical treatment of the data used to determine the effects of sports participation and gender on moral judgment in collegiate students at the University of Nevada, Las Vegas. Fifty-eight student athletes and nonathletes from the University of Nevada, Las Vegas volunteered to complete the Defining Issues Test, to measure moral judgment, and a Biographical Questionnaire, to collect data on the variables, sports participation, and gender.

Defining Issues Test

Based on Kohlberg's theory (1969) that individuals continuously moved through stages of moral reasoning from childhood through adulthood (Kilgannon & Erwin, 1992), the Defining Issues Test (Rest, 1979, 1988) was an adaptation of Kohlberg's use of dilemmas in measuring moral judgment. Kohlberg's theory was specific to moral judgement and development. His theory of moral reasoning and development identified six stages of moral reasoning processed in three levels beginning with stage one and level one. (See Figure 2)

Although Kohlberg's (1976) theory of moral judgment provided the framework for much of the research on the development of moral concepts, "... it [was] difficult to draw conclusions about the moral judgment of college students from the studies based on his moral development theory" (Colby, p. 31). Rest adapted Kohlberg's cognitive moral development theory to an objective measurement tool, the Defining Issues Test, which investigated moral judgment by examining the choices an individual made in solving a series of moral dilemmas (Sapp, 1986).
The Defining Issues Test produced moral judgment scores that measured the conceptual frameworks that participants used to analyze a social-moral problem and determine the proper course of action (Rest, Masanz, Coder, Cooper, & Anderson, 1974). Six dilemmas were used, each accompanied by a set of twelve items, for a total of seventy-two items for the whole test. Rest (1986) explained that the items "were designed to represent the different considerations that were diagnostic of different schemes of fairness (i.e., moral judgment stages)" (p. 196). Issues were worded such that they reflected a predetermined stage of moral judgment or an internal reliability check on a subject's ability to follow instructions.

Reliability estimates or internal consistency for the Defining Issues Test was .76 (Kilgannon & Erwin, 1992). As recommended by Rest (1974), students with meaningless scores greater than 8 and with inconsistency check failures were eliminated from further analyses. The Defining Issues Test included an internal reliability check whether a subject was attending to the meaning or more to surface features of an item as well as an internal consistency check which determined if subjects were randomly responding without attending to any item feature (Rest, 1986).

The "construct" validation strategy used by Rest provided a variety of studies and findings originating in 1979 and corroborated in 1986 (Rest, 1990). Appendix F contains information about Rest's (1979, 1988) validation in terms of face validity, criterion group validity, longitudinal validity, convergent-divergent correlations, discriminate validity, experimental enhancement, and resistance to faking as well as on test-retest and internal consistency reliabilities.

The Defining Issues Test denoted both qualitative and quantitative differences between stages of moral development. The test was a recognition test rather than a production test presented in a multiple choice format that characterized the central core of stage definitions as following from different concepts of how social cooperation could be organized (Rest, 1986). Actual tests and answer
sheets were purchased from the Center for the Study of Ethical Development at the University of Minnesota.

First, subjects read a dilemma and chose from three actions the one they felt represented the best solution. Subjects then rated each of the twelve issues on its level of importance (from "great" to "no") in deciding that issue's relevance to the dilemma. Finally, subjects ranked four of the twelve issues on a hierarchy of importance from most important to fourth most important.

Scoring of the Defining Issues Test was based on the subject's ranking of issues. The four issues ranked as most important in each of the six dilemmas were given a weighted raw score ranging from four (most important) to one (fourth most important). The weighted raw scores were then recorded for the state or reliability check that the issue represents.

For example, if a subject ranked issues five (a Stage 3 item) on the Heinz story as most important, four points were given to Stage 3. These scores were then totalled for Stages 2 through 6 and the reliability check, producing a stage profile for each subject. The Principled Morality Score (P Index) was then obtained by summing the scores on Stages 5A, 5B, and 6 and converting that sum (57 being the highest raw score possible) to a percentage, ranging from 0-95. The Principled Morality Score represented the percentage of postconventional moral judgment that a subject was employing to resolve moral dilemmas. This Principled Morality Score for each subject was interpreted as the relative importance attributed to principled moral considerations in making moral decisions (Rest, 1990).

Characterizations of each of the scores are as follows:

Stage 2 represented considerations that focused on the direct advantages to the actor and on the fairness of simple exchanges of favor for favor.

Stage 3 represented considerations that focused on the good or evil intentions of the parties, on the party's concern for maintaining friendships and good relationships, and maintaining approval.
Stage 4 represented considerations that focused on maintaining the existing legal system, maintaining existing roles and formal organizational structure.

Stage 5A represented considerations that focused on organizing a society by appealing to consensus producing procedures (such as abiding by the will of the people), insisting on due process (giving everyone his/her day in court), and safeguarding minimal basic rights.

Stage 5B represented considerations that focused on organizing social arrangements and relationships in terms of intuitively appealing ideals (but which may lack a rationale for gaining general support).

Stage 6 represented considerations that focused on organizing society in terms of ideals that appealed to a rationale for eliminating arbitrary factors and that were designed to optimize mutual human welfare (Rest, 1987, 1990).

The Principled Morality Score has shown the most consistent reliability and validity trends of any index based on the Defining Issues Test (Rest, 1986). Hanson (1982) advocated that the extent and variety of studies on the Defining Issues Test suggested that [this test] was a solid measure of moral reasoning. When comparing the moral judgment of two or more groups, Rest (1988) recommended using the mean Principled Morality Score of each group as the measure of moral judgment to analyze the between-group variances.

In this study, the mean Principled Morality Score of the athletes and nonathletes; of the males and females; and of the male athletes, female athletes, male nonathletes and female nonathletes, were used for analysis. In addition, comparisons were made with Rest's Principled Morality Score norms for the college population. Rest's (1990) moral judgment norms were derived from two secondary analyses based on his test scores of over 12,000 subjects participating in hundreds of studies. Rest stated that, although these studies "[did] not constitute a truly representative sample of the United States drawn at random" (p. 19), he had confidence in these normative data because the two secondary analyses produced findings that were very similar to
each other. Additionally, the data base of studies using the Defining Issues Test constituted the largest and most diverse body of information on moral judgment in existence (Rest, 1986).

**Biographical Questionnaire**

This instrument (see Appendix G) consisted of questions to obtain data on the variables used in this study: the student's gender, athletic status, and number of seasons of intercollegiate athletic involvement. In addition, the questionnaire requested the student's age, ethnicity, religiosity, grade level, sport, and major. Students who indicated that they had not participated on any collegiate athletic team were identified as nonathletes while students who indicated that they had participated in baseball, basketball, soccer or softball were determined to be athletes.

A five-digit coding system was designed to facilitate analysis of the independent variables and to give each student a unique identification number. (See Appendix K)

**Sample Description**

Of the fourteen intercollegiate sports offered at the University of Nevada, Las Vegas, two team sports for women were tested; softball and basketball, while baseball and soccer were selected for men. A total sample of 27 athletes were tested. Initially, the original two male team sports selected were baseball and basketball, in order to be comparable with women's softball and basketball. However, it was not possible to obtain cooperation from men's basketball. Therefore, the alternate team sport selected was men's soccer.

The four sports sampled had been part of the University of Nevada, Las Vegas intercollegiate athletic program for an average of 15 years for women and 21.5 years for men:
As a control group, a general Psychology 101 course was selected where 38 subjects completed the Defining Issues Test and Biographical Questionnaire. Although these subjects were not selected randomly from a larger population, the characteristics of the subjects appeared representative of much of the student athlete population. The Biographical Questionnaire allowed for screening for comparable representation which included undergraduate status and an age range of 18-22 years. As a result, there were 17 participants who were screened out of the sample, leaving a total of 21 nonathletes for the control group sample.

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<th>Sample Size &amp; Distribution</th>
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<tr>
<td>Athletes</td>
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<tr>
<td>Women's Softball</td>
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<td>Women's Basketball</td>
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<td>Sample Total: 58</td>
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Administration of the Instrument

Upon permission from the perspective coach and academic advisor from each sport, the Defining Issues Test and Biographical Questionnaire were administered during the prescribed study halls or at a prearranged time and location. A statement to all participants (see Appendix J) and a testing packet for every participating student was distributed. The testing packet included the Biographical Questionnaire, a Defining Issues Test instruction booklet, and an answer sheet. The time allocated for students to complete the Biographical Questionnaire and the Defining Issues Test was approximately 45 minutes, based on the guidelines in Rest's (1987, 1990) manual. All participants were administered the Defining Issues Test and the Biographical Questionnaire at the end of the 1992 academic year.

Participants completed the Biographical Questionnaire to determine the independent variables of sports participation, gender, and, if athletes, the number of seasons of participation in sports. They then completed Rest's Defining Issues Test to determine the dependent variable, moral judgment, as represented by the Principled Score Index. Defining Issues Tests and answer sheets were obtained from the Center for the Study of Ethical Development at the University of Minnesota.

By administering the Defining Issues Test to a sampling of undergraduate students and a comparable undergraduate sampling of student athletes at the University of Nevada, Las Vegas, the level of moral reasoning between these two populations were assessed and analyzed. In addition, the relationship between sports participation and gender and moral judgment were examined. Finally, the Principled Score Index was compared against the standardized sample from the University of Minnesota's Center for Ethical Development.
Insuring Ethical Standards

A Statement of Exemption was obtained per the University of Nevada, Las Vegas Policies and Procedures on the Use of Human Subjects Research. There were no invasive treatment procedures, such as psychological or physical intervention. However, human subjects procedures for anonymity were followed. (See Appendix III).

Obtaining Permission to Administer the Study

A letter of support was received from Dr. Robert Ackerman, Vice President for Student Services. As Vice President for Student Services, the topic of moral reasoning development within the general student body was a topic of concern and interest within the Division of Student Services. (See Appendix IV).

Endorsement was also received from Dr. James Kitchen, Associate Dean of Students. (See Appendix IV) Dr. Kitchen was responsible for the academic advisement of student athletes. Student athletes were administered the Defining Issues Test and a Biographical Questionnaire via athlete academic advisors during study halls or during a special session arranged through the coach or academic advisor of each sport.

Professional Association Support

The Research Committee of the Association for Student Judicial Affairs (ASJA) provided grant funding in the amount of $391.00 for the purpose of purchasing the Defining Issues Tests and answer sheets from the University of Minnesota’s Center for the Study of Ethical Development. As a requirement in receiving this grant, a presentation at the annual Association for Student Judicial Affairs conference or a professional article or publication was required at the completion of this study. (See Appendix IV).
Design

The study was quasi-experimental. The design for this study was a 2 (sports participation) X 2 (gender) analysis of variance (ANOVA). Sports participation (athletes and nonathletes and gender (males and females) were chosen as categorical variables in the statistical design. Moral judgment, as measured by the Principled Morality Score (P Index), was the dependent variable. The independent variables of sports participation and gender were between-subject factors. Participants were assigned to one of four groups (male athlete, male nonathlete, female athlete, female nonathlete) based upon sports participation and gender.

Data Analysis

An analysis of variance was used to address the following hypotheses:

1. Athletes would score lower on moral judgment (the P Index) than their nonathletic peers.
2. Males would score lower on moral judgment (the P Index) than their female peers.
3. Male athletes would score lower on moral judgment (the P Index) than female athletes, male nonathletes, and female nonathletes.
4. Female athletes would score lower on moral judgment (the P Index) than male and female nonathletes.

The main effects of sports participation and gender were examined as to their means and variances on the Defining Issues Test Principled Morality Score (P Index), in addressing hypotheses one and two. The interaction effects for sports participation by gender were examined as to their means and variances on the Principled Morality Score for hypotheses three and four.

Frequency distributions for the variables included in the Biographical Questionnaire (number of seasons of sports participation, specific sport, religiosity, ethnicity and academic major) and Defining Issues Test were run to explore additional data beyond the stated
hypotheses. This supplementary analysis was used to explore how these variables related to the variance in the moral judgement of collegiate athletes at the University of Nevada, Las Vegas.

Summary

This chapter has presented a description of the research methodology, data collection techniques, and statistical treatment of the data used to determine the effects of sports participation and gender on moral judgment in collegiate students at the University of Nevada, Las Vegas. The results of data analysis and discussion of the pertinent findings have been presented in Chapter four. Chapter five concluded the investigation with summary remarks and recommendations for future study.
CHAPTER 4

ANALYSIS OF DATA

The purpose of Chapter four is to describe the results of the data analysis related to the Defining Issues Test, hypotheses testing, and content analysis of the Biographical Questionnaire. Following the results, a discussion has been presented of the pertinent findings and their relationship to the questions listed in the statement of the problem.

Seventy-five Defining Issues Tests and Biographical Questionnaires were distributed to student athletes and nonathletes at the University of Nevada, Las Vegas. Respondents were administered the Defining Issues Test and the Biographical Questionnaire in a classroom setting. All tests were administered by the same proctor, and all tests were completed between April 9, 1992 and June 23, 1992, near the end or following the completion of Spring semester, 1992.

A total of 38 student nonathletes completed the Defining Issues Test and Biographical Questionnaire. There were 17 tests completed by nonathlete students over the age of 22 years. These tests were screened out in order to establish a comparable age category of 17 to 22 years of age between student athletes and nonathletes. The student nonathlete control group was composed of 21 volunteers from a General Psychology 101 course who completed the Defining Issues Test and Biographical Questionnaire.

A total of 37 student athletes volunteered to complete the Defining Issues Test and Biographical Questionnaire. Representation of each sport was as follows: 12 women's softball players, 7 women's basketball players, 11 men's baseball players, and 7 men's soccer players.
The following variables were explored from responses to the Biographical Questionnaire:

(1) athlete/nonathlete
(2) gender
(3) age
(3) ethnicity
(4) religiosity
(5) grade level at UNLV
(6) whether a junior college transfer or not
(7) number of seasons of intercollegiate participation
(8) number of years residing within Nevada
(9) whether on an athletic scholarship or not
(10) whether on financial assistance or not
(11) academic major

In addition, respondents completed Rest's (1979, 1988) Defining Issues Test, an objective measure, to determine the dependent variable, moral judgment, as represented by the Principled Morality Index score. The independent measures were sports participation (athlete, nonathlete) and gender (male, female) in between subject statistical analyses.

Statistical analyses were conducted in conjunction with the Center for the Study of Ethical Development at the University of Minnesota. Twenty-four cases (41.4%) of the Defining Issue Tests were lost due to validity problems.

A summary of the findings from the valid Defining Issues Tests (n=34) were presented in the following format:

1.) Frequency distributions for the variables included in the Biographical Questionnaires.
2.) ANOVA tables for the regressions of the Defining Issues Test scores on athlete status, gender, and athlete by gender interactions (2X2 ANOVA).
3.) Stepwise regression and backward regression on the Defining Issues Test Principled Morality Score.
One additional section included analyses of all Defining Issues Test scores (n=58), including those that were excluded in the validity checks.

Following the test results, the results of testing the four hypotheses were presented.

Distribution

The nonathlete control group (n=21) comprised 36% of the sample while the student athlete sample (n=37) comprised 64% of the sample. Women's basketball (n=7) was 12%, women's softball (n=12) was 22%, men's baseball (n=11) was 19% and men's soccer (n=7) was 12% of the total sample (n=58).

Table 1

<table>
<thead>
<tr>
<th>Population</th>
<th>Number Responding</th>
<th>Percent Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>21</td>
<td>36%</td>
</tr>
<tr>
<td>Women's Basketball</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td>Women's Softball</td>
<td>12</td>
<td>21%</td>
</tr>
<tr>
<td>Men's Baseball</td>
<td>11</td>
<td>19%</td>
</tr>
<tr>
<td>Men's Soccer</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>58</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

In summary, the control group comprised 36%, women athletes were 33% and male athletes were 31% of the total sample.
Gender

There was an overall total of 27 males of which 18 were athletes and 9 were nonathletes and 31 females of which 19 were athletes and 12 were nonathletes who participated in the study. The male sample comprised 47% while the female sample comprised 53% of the total sample.

Table 2
Gender

<table>
<thead>
<tr>
<th>Population Sample</th>
<th>Number Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Athletes</td>
<td>18</td>
</tr>
<tr>
<td>Female Athletes</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total Athletes</strong></td>
<td><strong>37</strong></td>
</tr>
<tr>
<td>Male Nonathletes</td>
<td>9</td>
</tr>
<tr>
<td>Female Nonathletes</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Nonathletes</strong></td>
<td><strong>21</strong></td>
</tr>
<tr>
<td>Male Respondents</td>
<td>27</td>
</tr>
<tr>
<td>Female Respondents</td>
<td>31</td>
</tr>
<tr>
<td><strong>Total Sample</strong></td>
<td><strong>58</strong></td>
</tr>
</tbody>
</table>
Age

There were six respondents (11%) who were 18 years of age, 12 respondents (21%) who were 19 years old, 13 respondents (22%) who were 20 years old, 13 respondents (22%) who were 21 years of age and 14 respondents (24%) who were 22 years old.

Table 3
Age

<table>
<thead>
<tr>
<th>Years of Age</th>
<th>Number Responding</th>
<th>Percent Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>6</td>
<td>11%</td>
</tr>
<tr>
<td>19</td>
<td>12</td>
<td>21%</td>
</tr>
<tr>
<td>20</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>21</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>22</td>
<td>14</td>
<td>24%</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>100%</td>
</tr>
</tbody>
</table>

Ethnicity

Of the sample (n=58), 39 respondents (68%) were Caucasian, 6 respondents (10%) were African/American, 6 (10%) had a Spanish surname, five (9%) were Native American, and two (3%) did not identify an ethnic origin.
Table 4
Ethnicity

<table>
<thead>
<tr>
<th>Ethnic Origin</th>
<th>Number Responding</th>
<th>Percent Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>39</td>
<td>67%</td>
</tr>
<tr>
<td>African/American</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Spanish Surname</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Native American</td>
<td>4</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57</strong></td>
<td><strong>98%</strong></td>
</tr>
</tbody>
</table>

Religious Affiliation

Seven respondents (12%) said they attended a religious affiliation once a week or more, 12 (21%) said they attended a religious affiliation once a month or more, 18 (32%) said they attended a religious affiliation once a year or more and 20 respondents (35%) said they attended a religious affiliation less than once a year. There was one missing respondent to this particular question from the Biographical Questionnaire.
Table 5
Religiosity

<table>
<thead>
<tr>
<th>Religiosity</th>
<th>Number Responding</th>
<th>Percent Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend once a week or more</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td>Attend once a month or more</td>
<td>12</td>
<td>21%</td>
</tr>
<tr>
<td>Attend once a year or more</td>
<td>18</td>
<td>31%</td>
</tr>
<tr>
<td>Attend less than once a year</td>
<td>20</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57</strong></td>
<td><strong>99%</strong></td>
</tr>
</tbody>
</table>

Grade Level

There were 22 freshmen (38%), 14 sophomores (24%), 11 junior (19%), and 11 seniors (19%) who participated in the study.
Table 6
Grade Level

<table>
<thead>
<tr>
<th>Grade Level at UNLV</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>22</td>
<td>38%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>14</td>
<td>24%</td>
</tr>
<tr>
<td>Junior</td>
<td>11</td>
<td>19%</td>
</tr>
<tr>
<td>Senior</td>
<td>11</td>
<td>19%</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>100%</td>
</tr>
</tbody>
</table>

Junior College Transfer

There were six respondents (10%) who had transferred from a junior college and 52 (90%) who had not transferred from a junior college before attending the University of Nevada, Las Vegas.
Table 7
Junior College Transfer

<table>
<thead>
<tr>
<th>Junior College Transfer</th>
<th>Number Responding</th>
<th>Percent Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior College Transfer</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Not A Junior College Transfer</td>
<td>52</td>
<td>90%</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>100%</td>
</tr>
</tbody>
</table>

Number of Seasons of Collegiate Participation

Seventeen respondents (32%) said they had never participated in collegiate athletics. There were also four missing answers (7%) to this particular question from the Biographical Questionnaire which, when added together, would total 21 (38%), the total number of student nonathlete sample.

Of the athlete sample, 12 respondents (22%) had participated in one season, 8 athletes (15%) had participated in two seasons, 7 athletes (13%) had participated in 3 seasons, and 10 athletes (19%) had participated in 4 seasons.
Table 8
Number of Seasons of Collegiate Athletic Participation

<table>
<thead>
<tr>
<th>Number of Seasons</th>
<th>Number Responding</th>
<th>Percent Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>17</td>
<td>29%</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
<td>21%</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>14%</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>17%</td>
</tr>
<tr>
<td>No Response</td>
<td>4</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>100%</td>
</tr>
</tbody>
</table>

Number of Years Residing in Nevada

Twenty-seven respondents (47%) had resided in Nevada between six months and three years. Ten respondents (17%) had lived in Nevada between four and six years. The remaining 19 respondents (33%) had lived in Nevada between 10 and 22 years. There were two respondents (3%) who did not respond to this Nevada residency question on the Biographical Questionnaire. The median number of years the respondents resided in Nevada was four years with the mode being one year.
Table 9  
Number of Years Resident of Nevada

<table>
<thead>
<tr>
<th>Number of Years Responding</th>
<th>Number Responding</th>
<th>Percent Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months-3 years</td>
<td>27</td>
<td>47%</td>
</tr>
<tr>
<td>4 - 6 years</td>
<td>10</td>
<td>17%</td>
</tr>
<tr>
<td>10-22 years</td>
<td>19</td>
<td>33%</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>97%</td>
</tr>
</tbody>
</table>

Athletic Scholarship/Financial Assistance

Of the 37 student athletes who volunteered for this study, 32 (56%) were on an athletic scholarship. Additionally, 12 respondents (21%) said they had received assistance through Student Financial Services. There was one missing response to this question (2%).
Table 10
Athletic Scholarship/Financial Assistance

<table>
<thead>
<tr>
<th>Athletic Scholarship or Financial Assistance</th>
<th>Number Responding</th>
<th>Percent Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Athletic Scholarship</td>
<td>32</td>
<td>55%</td>
</tr>
<tr>
<td>Not On Athletic Scholarship</td>
<td>25</td>
<td>43%</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>98%</td>
</tr>
<tr>
<td>Received Financial Assistance</td>
<td>12</td>
<td>21%</td>
</tr>
</tbody>
</table>

Majors

Due to the variety of academic majors, analysis was not run. However, the majors of all respondents are listed and grouped by college as follows:

**College of Business and Economics**
- Accounting: 5
- Public Administration: 2
- Economics: 2
- Marketing: 3

Total: 12

**College of Education**
- Elementary Edc.: 1

Total: 1
### College of Engineering, Howard R. Hughes
- Architecture: 3
- Computer Science: 1
- Engineering: 2
- Electrical Engineering: 1

Total: 7

### College of Fine and Performing Arts
- Film Studies: 1

Total: 1

### College of Health Sciences
- Pre-Med: 3

Total: 3

### College of Hotel Administration
- Hotel Administration: 5

Total: 5

### College of Human Performance and Development
- Athletic Training: 2
- Physical Education: 1

Total: 3

### College of Liberal Arts
- Criminal Justice: 3
- English: 2
- Psychology: 5

Total: 10
College of Science and Mathematics
No undergraduate majors from this college participated in the study

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Greenspun School of Communications

<table>
<thead>
<tr>
<th>Major</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>3</td>
</tr>
<tr>
<td>Journalism</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Student Development Center (undecided majors)

<table>
<thead>
<tr>
<th>Status</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undecided</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Grand Total 58

ANALYSIS OF VARIANCE

In the investigation, the dependent measure was moral judgment as measured by the Defining Issues Test scores, particularly the principled morality score. Note that 41.1% of the Defining Issues Tests were lost due to validity problems. Therefore, of the original 58 tests, 34 responses were valid (See Table 11).
TABLE 11
Valid Defining Issues Test Scores

<table>
<thead>
<tr>
<th>Valid Defining Issues Test Scores</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonathletes</td>
<td>12</td>
<td>38%</td>
</tr>
<tr>
<td>Athletes</td>
<td>22</td>
<td>29%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>34</td>
<td>67%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
<td>30%</td>
</tr>
<tr>
<td>Female</td>
<td>16</td>
<td>35%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>34</td>
<td>65%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Nonathletes</td>
<td>5</td>
<td>35%</td>
</tr>
<tr>
<td>Female Nonathletes</td>
<td>7</td>
<td>41%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>76%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Athletes</td>
<td>13</td>
<td>29%</td>
</tr>
<tr>
<td>Female Athletes</td>
<td>9</td>
<td>30%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22</td>
<td>59%</td>
</tr>
</tbody>
</table>

It was not possible to specifically decipher the reason for the invalid Defining Issues Tests, only that the tests did not meet the validity construct. The distribution differences of invalid Defining Issues Tests that were lost between the groups tested was noted. The sample of nonathletes was changed from 21 to 12 (a loss of 9 test scores) and from the athlete sample, from 37 to 22 (a loss of 15 test scores). In
reference to gender, there were originally 27 male participants in the study which was altered to 18 test scores following the validity test (a loss of 9 tests) and, of the original 31 female participants, 16 Defining Issues Test scores remained following the validity test (a loss of 15 test scores). The group that had the highest invalidity result was female athletes. Of the 19 participants, 10 tests were invalid. Comparatively, for male athletes, of the 18 participants, five tests were invalid.

Participants in the study received a score for all six stages as well as the Davison Score and the Principled Morality Index Score.

In research utilizing the Defining Issues Test, it has not been useful to study specific stage scores because subjects are attracted to a variety of types of moral reasons. However, what has been found is that over time and with development, subjects come to use less of the lower stages (Stages 2, 3, and 4) and more of the higher stages (Stages 5A, 5B and 6). Hence, the Principled Morality Index Score was developed as a useful general index of moral judgment development (Rest, p. 12, 1990).

Analysis of variance (ANOVA) tables for the regressions of the Defining Issues Test scores on athlete status, gender and athlete by gender interactions (2X2 ANOVA) revealed four significant F-statistics in the set of 33 regression analyses (p <.05). These four findings were separate from the hypotheses. Additionally, due to the number of regressions, one or two regression results would have resulted in statistical significance by chance alone. However, these findings were the only statistically significant findings following the analysis of variance. There were four statistically significant findings between stages. These findings offered insight only to the extent of comparison between the four groups tested: athletes and nonathletes, females and males. The specific findings and related relationship to the study were as follows:

First Significant F-Statistic. In the analysis of variance results between nonathletes and student athletes for stage 2, there was an F-statistic of 4.523 (p=.042). Nonathletes (n=12) scored 3.25 while student athletes (n=22) scored 5.32.
At Stage 2, an individual's orientation was naively egotistic. For individuals functioning at this stage, right action became that which satisfied one's own needs and occasionally the needs of others (Rest, 1976). Comparatively, Rest (1990) provided a Standardization Sample from a large sample of 1,080 subjects. The Defining Issues Test Indice for Stage 2 for college students was 3.05. The nonathletes were comparable to this indice of 3.25 while student athletes scored relatively high with a score of 5.32, when compared to either the standardization sample or the University of Nevada, Las Vegas nonathlete sample.

The y regression for the dependent variable, Stage 2, showed a statistically significant difference between student athletes and nonathletes. Student athletes scored a statistically significant higher score for this particular stage than student nonathletes (See Table 12). In this study, student athletes ranked higher in their considerations that focused on direct advantages to themselves and the most basic understanding of fairness; favor for favor. Although student athletes ranked higher than student nonathletes, Stage 2 was the lowest level in moral development. This finding may simply be saying that student nonathletes used the higher stages of moral development more while student athletes used the lower stage more in their moral development.

### TABLE 12
Analysis of Variance Results for Stage 2

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete</td>
<td>33.884</td>
<td>1</td>
<td>33.884</td>
<td>4.523</td>
<td>.042</td>
</tr>
</tbody>
</table>
Second Significant F-Statistic. In the analysis of variance between nonathletes and student athletes for stage 5B, there was a F-statistic of 5.031 (p=.032). Nonathletes scored 4.92 and athletes scored 3.45.

There was a statistically significant difference between nonathletes and student athletes in stage 5B. The regression for the dependent variable, Stage 5B, resulted in nonathletes that scored significantly higher than athletes (See Table 13).

When compared to the Defining Issues Test Indices from the Standardization Sample (n=1,080) by Rest (1990), the indice for stage 5B for college students was 5.20. Although nonathletes scored significantly higher (4.92) than athletes in stage 5B, the scores were not as high as the indice provided by Rest (5.20) while athletes scored relatively lower (3.45) in this particular stage.

At Stage 5, an individual's orientation was seen as a social contract and legalistic in nature. Right action, aside from what was constitutionally and democratically agreed upon, was a matter of personal "values" and "opinions." Stage 5 was divided into two areas in accordance to the interpretation of the Defining Issues Test. Stage 5A represented considerations that focused on organizing a society by appealing to consensus producing procedures (such as abiding by the will of the people), insisting on due process and safeguarding minimal basic rights. Stage 5B represented considerations that focused on organizing social arrangements and relationships in terms of intuitively appealing ideals, but which may lack a rationale for gaining general support (Rest, 1987, 1990 p. 12).

Therefore, nonathletes scored significantly higher than athletes at this higher stage of moral development, 5B, which dealt with considerations for organizing social arrangements and relationships for the purpose of attaining appealing ideals. Although nonathletes scored significantly higher than their counterparts, they did not score as high as the indice provided by James Rest (1990). University of Nevada, Las Vegas nonathletes reflected a more advanced moral development than
athletes at Stage 5B. Therefore, nonathletes appeared to be using the higher stages of moral development more than athletes, but not to the same degree as the indice from the standardization sample.

Third Significant F-Statistic. Also in stage 5B, in analysis of variance between genders, there was a significant F-statistic of 5.443 (p=.027). Males scored 4.67 and females scored 3.19.

There was a statistically significant difference between male and female students in stage 5B. The regression for the dependent variable, Stage 5B, resulted in males scoring higher (4.67) than females (3.19). Again, the Defining Issues Test Indice from the Standardization Sample (n=1,080) provided a score of 5.20 for college students (Rest, 1990). Males scored relatively close to this indice (4.67), but females scored relatively lower (3.19) for the stage 5B indice. Therefore, male students possessed a more developed reasoning in moral development in their consideration for organizing social arrangements and relationships in terms of intuitive ideals when compared to the female sample, but not as developed as the standardization sample provided by Rest for college students.

TABLE 13
Analysis of Variance Results for Stage 5B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete</td>
<td>23.625</td>
<td>1</td>
<td>23.625</td>
<td>5.031</td>
<td>.032</td>
</tr>
<tr>
<td>Gender</td>
<td>25.558</td>
<td>1</td>
<td>25.558</td>
<td>5.443</td>
<td>.027</td>
</tr>
</tbody>
</table>
Fourth Significant F-Statistic. In the Davison score, there was a F-statistic of 4.768 (p=.037) between athletes (17.38) and nonathletes (23.38).

The Davison score, based on Mark Davison's scaling analysis of the Defining Issues Test items, derived scale values for the items through a latent-trait unfolding process. It turns out that the Davison score behaves very much like the Principled Morality Index. In recent studies, the Principled Morality Index, however, had produced slightly stronger data trends (Rest, 1987, 1990, p. 13).

There was a statistically significant difference between athletes and nonathletes. The y regression for the dependent variable was the Davison score. Student nonathletes (n=12) received a statistically significant higher score, 23.38, than student athletes (n=22), who received 17.38 on the Davison Score (See Table 14). Given that the Davison score was comparable to the Principled Morality Index, although there was no statistically significant response difference between athletes and nonathletes in the Principled Morality Index Score, it was significant that there was a difference in the Davison Score. When compared to Rest's (1990) Defining Issues Test Standardization Sample Indices (n=1,080), the Davison Score standard for college students was 25.41. The University of Nevada, Las Vegas sample of both student athletes (17.38) and nonathletes (23.38) was relatively lower than the college standard. The results of the Davison scaling analysis of Defining Issues Test items, being comparable to the Principled Morality Index Score, does reflect that student nonathletes were at a statistically significant higher level of moral development than student athletes.

TABLE 14
Analysis of Variance Results for the Davison Score

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete</td>
<td>265.003</td>
<td>1</td>
<td>265.003</td>
<td>4.768</td>
<td>.037</td>
</tr>
</tbody>
</table>
A stepwise regression and backward regression on the Defining Issues Test Principled Morality Scores was also conducted. The regression technique was used to explore the strength of relationship between the dependent variable, the Principled Morality Index Score, and the independent variables of athlete/nonathlete, male/female, number of seasons participated in intercollegiate athletes, specific sport, race and religiosity. None of the regressions were significant. Therefore, none of the independent variables proved statistically significant in predicting moral judgment.

Two graphs were generated which summarized the valid Defining Issues Test Stage Scores by athlete/non-athlete and by gender. Males scored higher than females at Stage 4 of moral development, while females scored higher than males in their Principled Morality Index Score. Conversely, athletes scored higher at Stage 4 of moral development in comparison to their nonathlete peers, but nonathletes scored higher in their Principled Morality Index Score over the student athletes. Stage 4 represented consideration that focused on maintaining the existing legal system, maintaining existing roles and formal organizational structure (Rest, 1990). Stage 4 was considered to be in the lower levels of moral development. These graphs showed that college males and athletes may use the lower stage, Stage 4, more than college females and nonathletes. Therefore, college females and nonathletes may tend to use the higher stages more.

Finally, males scored lower than females and athletes tended to score lower than nonathletes on the Defining Issues Test Principled Morality Score Index. Again, the conclusion points to females and nonathletes having higher moral judgment development, although not statistically significantly higher (see Figures 1 and 2).
Supplementary Analysis

Due to the large percentage (41.1%) of invalid Defining Issues Tests, additionally, a one-way ANOVA on all Defining Issues Test scores (n=58) was conducted on the five different population groups: control group, women's basketball, women's softball, men's baseball and men's soccer. None of these ANOVAs were statistically significant.

Relationship to Hypotheses

Data were next examined to test the four hypotheses presented in Chapter one on page 6.

Hypothesis 1. There was no statistically significant difference at the 0.05 level between athlete scores on moral judgment, as measured by the Principled Morality Score, and their nonathletic peers. The analysis of variance statistic was used to determine significant differences at the 0.05 level between student athletes and student nonathletes in their Principled Morality Index Score from the Defining Issues Test. Analysis of variance revealed no statistically significant response differences at the 0.05 level (See Table 15). Athletes (n=22) scored 29.32 and nonathletes (n=12) scored 38.06.

TABLE 15

Analysis of Variance Results for the Principled Morality Index Score

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete</td>
<td>505.475</td>
<td>1</td>
<td>505.475</td>
<td>2.449</td>
<td>.128</td>
</tr>
</tbody>
</table>
Hypothesis 2. There were no statistically significant differences at the 0.05 level between males and females on moral judgment as measured by the Principled Morality Score. The analysis of variance was also used to determine significant differences at the 0.05 level between males and females in their Principled Morality Index Score from the Defining Issues Test. Analysis of variance revealed no statistically significant response differences at the 0.05 level. Male students (n=18) scored 30.28 and female students (n=16) scored 34.79 (See Table 16).

TABLE 16
Analysis of Variance Results for the Principled Morality Index Score

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>84.175</td>
<td>1</td>
<td>84.175</td>
<td>.408</td>
<td>.528</td>
</tr>
</tbody>
</table>

Hypothesis 3. There were no statistically significant differences at the 0.05 level between male athletes as compared with female athletes, male nonathletes and female nonathletes on moral judgment as measured by the Principled Morality Score. Analysis of variance to determine significant differences at the 0.05 level between male athletes and female athletes, male nonathletes and female nonathletes on moral judgment as measured by the Principled Morality Index Score revealed no statistically significant difference. Male athletes (n=13) scored 28.59 on the Principled Morality Index while male non-athletes (n=5) scored 34.68, female non-athletes (n=7) scored 40.47 and female athletes (n=9) scored 30.37.
### TABLE 17
Analysis of Variance Results for the Principled Morality Index Score

<table>
<thead>
<tr>
<th>2-way Interactions</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete/Gender</td>
<td>30.396</td>
<td>1</td>
<td>30.396</td>
<td>.147</td>
<td>.704</td>
</tr>
</tbody>
</table>

**Hypothesis 4.** There were no statistically significant differences at the 0.05 level between female athletes and male and female nonathletes on moral judgment as measured by the Principled Morality Score. The results of data analysis presented in Table 17 revealed no statistically significant differences at the 0.05 level between female athletes and male and female nonathletes on moral judgment as measured by the Principled Morality Score. Female athletes (n=9) scored 30.37 while male nonathletes (n=5) scored 34.68 and female nonathletes (n=7) scored 40.47 on the Principled Morality Index Score.

### Discussion

The following points relate to the specific questions raised in the statement of the problem.

**Question 1. Did athletes score lower in their Principled Morality Score on moral judgment than their nonathletic peer?** Student athletes (n=22) scored 29.32 and their nonathletic peers (n=12) scored 38.06. Therefore, although student athletes scored lower than their nonathletic peers, they did not score significantly lower (see Figure 2). The number of tests that were meaningless following the validity check affected the strength of the statistical analysis. Fifteen Defining Issues Tests were invalid for the student athlete sample group of 37 due to invalid tests scores, resulting in analysis of 22 valid test scores. Comparatively, nine Defining Issues Test scores were lost due to validity problems for the student nonathlete sample group of 21.
leaving only 12 valid test scores. The end result summarized in Table 18 was not a strong sample for either student athletes or student nonathletes. The principled reasoning score may have been significantly lower than reported Defining Issues Test norms (Rest, 1986) due to the relatively small sample size or the result of controlled variables (See Table 18). Nevertheless, the data does reflect a difference in moral judgment between athletes and nonathletes.

**TABLE 18**

Principled Reasoning Score

<table>
<thead>
<tr>
<th></th>
<th>Rest</th>
<th>Baldizan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>44.106 (n=424)*</td>
<td>30.28 (n=18)</td>
</tr>
<tr>
<td>Females</td>
<td>45.875 (n=436)*</td>
<td>34.79 (n=16)</td>
</tr>
</tbody>
</table>


**Question 2. Did males score lower in their Principled Morality Score on moral judgment than their female peers?** Male students (n=18) scored 30.28 while female students (n=16) scored 34.79. Therefore males did score lower than female students, but not significantly lower (see Figure 1). Again, the low results may have been affected by the relatively small sample size following the validity check or the result of uncontrolled variables. Like Bredemeier and Shields (1984a), and Hall (1986), females did score higher than males on principled reasoning. From a cognitive development perspective there should have been no difference between men and women in their levels of moral reasoning (Hall, 1986, p. 201). The findings of this research did align with Rest's assertion (1986) that females have historically scored slightly higher than males (but not statistically significant higher) in the Defining Issues Test Principled Judgement.
Index Score. Therefore, there did not appear to be a gender bias in the Defining Issue Test.

**Question 3.** Did male athletes score lower in their Principled Morality Score on moral judgment than female athletes, male nonathletes, and female nonathletes? Male athletes (n=13) scored 28.59 in their Principled Morality Score on moral judgment while female athletes (n=9) scored 30.37, male nonathletes (n=5) 34.68, and female nonathletes (n=7) scored 40.47 (see Table 19). Therefore, male athletes did score lower in their Principled Morality Score on moral judgment than female athletes, male nonathletes and female nonathletes, although not significantly lower.

The larger question was focused on the kinds of lessons sport may teach. Male athletes who have traditionally been involved in intercollegiate athletics and sports, in general, over a longer period of time, may exhibit a lower level of moral reasoning which could be attributed to athletic involvement. Although this study did not explore sport-specific moral dilemmas, but rather, general social situations, the difference between male athletes from female athletes or male or female nonathletes suggests the need for further research.

### Table 19
Principled Morality Index Score Results

<table>
<thead>
<tr>
<th>Population</th>
<th>Frequency</th>
<th>Principled Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male athletes</td>
<td>13</td>
<td>28.59</td>
</tr>
<tr>
<td>Female athletes</td>
<td>9</td>
<td>30.37</td>
</tr>
<tr>
<td>Male Nonathletes</td>
<td>5</td>
<td>34.68</td>
</tr>
<tr>
<td>Female Nonathletes</td>
<td>7</td>
<td>40.47</td>
</tr>
</tbody>
</table>
Question 4. Did female athletes score lower in their Principled Morality Score on moral judgment than male and female nonathletes?

As stated in Question 3, female athletes (n=9) scored lower on their Principled Morality Index Score with an index of 30.37, than either the male nonathletes (n=5) who scored 34.68 or female nonathletes (n=7) who scored 40.47. However, again, the differences were not significantly lower (p<.05).

However, in this study, female non-athletes and female athletes both scored higher than their male counterparts. Bredemeier and Shields (1984a) suggested that possibly a commitment to sport may provide a more growth-producing experience for women than for men, at least in exploring the effect of athletic involvement in moral development.

Summary

This chapter presented the results of data analysis and discussion relative to the effects of intercollegiate athletic participation and gender on moral judgment for students who were athletes and nonathletes at the University of Nevada, Las Vegas. Approximately 41 percent of the Defining Issues Tests were invalid following the construct validation process for the Defining Issues Test. There were 34 remaining valid tests used in the statistical analysis.

Analysis showed that student athletes were more developed than student nonathletes in Stage 2 of moral development. The student athletes who took part in this study appeared to understand the sense of fairness in the terms of "favor for favor" (Rest, 1986) better than student nonathletes. A significant difference was also found between student athletes and nonathletes and between males and females in stage 5B. In this stage, nonathletes tested significantly higher than athletes and males tested significantly higher than females in their cognitive development to consider organizing social
arrangements and relationships in terms of intuitively appealing ideals (which may lack a rationale for gaining general support) (Rest, 1986).

Finally, the Davison score assessed values from the *Defining Issues Test* and was comparable to the Principled Morality Index Score, (Rest, 1987, 1990). Davison scores for student nonathletes were significantly higher than student athletes. Therefore, there were significant results that reflected student nonathletes possessed a higher moral judgement than student athletes.

There were no differences between athlete scores on moral judgement as measured by the Principled Morality Score and their nonathletic peers. There were no differences between males and females on moral judgment as measured by the Principled Morality Score. There were no differences between male athletes as compared with female athletes, male nonathletes and female nonathletes on moral judgment as measured by the Principled Morality Score. Finally, there were no differences between female athletes and male and female nonathletes on moral judgment as measured by the Principled Morality Score.
CHAPTER FIVE

Summary, Conclusions and Recommendations

The purpose of Chapter five is to present a summary of pertinent findings, conclusions based upon the findings, and suggestions for future research.

Restatement of the Problem

The historic role of higher education acting as in loco parentis has undergone many changes, yet the concept of educating the whole person has remained an integral mission. Within higher education, intercollegiate athletics has long advocated a relationship between moral development and sport participation. However, questions have been raised whether athletic competition created an adverse affect on moral behavior. The cognitive development theory provided sparse empirical data and differing opinions on moral development in sport. However, a higher moral development score had been predicted for nonathletes over athletes.

Additionally, gender differences were explored between male and female moral development, and whether a difference between students who have or have not participated in intercollegiate athletics exists. The instrument used was James Rest's Defining Issues Test. This questionnaire evaluated moral development with an objective measure of Kohlberg's stages to measure moral reasoning in the form of a principled reasoning score. Given that the role of higher education and the profession of Student Affairs encompassed moral development of the student, this study was conducted to examine the effects of intercollegiate athletic participation and gender on moral judgment.

Seventy-five students completed a biographical questionnaire and Defining Issues Test at the University of Nevada, Las Vegas to determine the independent variables, gender and sports participation and the dependent
variable, moral judgment, as measured by the Principled Morality Index Score. Fifty-eight biographical questionnaires and thirty-four Defining Issues Tests were analyzed. The 2 X 2 analysis of variance (ANOVA) test was used to determine if statistically significant differences between athlete status, gender and athlete by gender interactions existed in moral judgment as measured by the Defining Issues Test's Principled Morality Index Score. Content analysis of the 34 valid tests and 58 biographical questionnaires were used to determine the extent and frequency to which four hypotheses were addressed.

Summary

Results were summarized as follows:

1. Student athletes utilized the lowest stage of moral development, Stage 2, in the Defining Issues Test, more than student nonathletes. According to this stage interpretation, the student athletes' orientation were more predominant in naive egotism than student nonathletes. Students athletes exercised the consideration of "favor for favor" more than student nonathletes. Therefore, because student athletes tended to use the lower Stage 2 more than the student nonathletes, student nonathletes tended to use the higher stages (above Stage 2) more. This meant that student nonathletes were more developed than student athletes in moral judgment stage scores above Stage 2.

2. Student nonathletes utilized one of the higher stages of moral development, Stage 5B, in the Defining Issues Test, more than student athletes. According to this stage interpretation, the student nonathletes' considerations for organizing social arrangements and relationships for the purpose of attaining intuitively appealing ideals was used more than student athletes. Student nonathletes were more capable of considering social arrangements and relationships when deciding what they felt was socially just and fair. In common terms, nonathletes were capable of considering conceptual variables such as inter-and intrapersonal relationships and social structures in accordance to their intuition when making moral judgment decisions.
3. Male students utilized Stage 5B more than female students, reflecting a more developed reasoning in moral development when considering organizing social arrangements and relationships in terms of intuitive ideals. Stage 5 reflected the respondent's social obligation beyond law and order. Within the six moral dilemmas in the Defining Issues Test, items were designed to represent different considerations. Males considered social arrangements and relationships more than females in arriving at what they thought was right and fair in a moral dilemma situation.

4. The results of the Davison scaling analysis of the Defining Issues Test, being comparable to the Principled Morality Index Score, reflected that student nonathletes possessed a higher level of moral judgment than student athletes.

5. College males and athletes used the lower stage, Stage 4, representing consideration that focused on maintaining existing formal structures, more than college females and nonathletes. Therefore, college females and nonathletes tended to use the higher stages more. This meant that males considered existing, formal structures more than females in arriving at what they thought was right and fair in a moral dilemma situation.

6. Nonathletes scored higher on the Defining Issues Test Principled Morality Index Score over student athletes, although not statistically significantly higher. Rest (1990) said that the Principled Morality Index Score represented the degree to which a person's thinking was like the thinking of moral philosophers. In lay terms, this was interpreted to mean that nonathletes were more developed in their moral judgment than athletes.

7. Males scored lower than females on the Defining Issues Test Principled Morality Index Score, although not statistically significantly lower at the 0.05 level. This meant that there was a slight difference between male respondents and female respondents in this study, where males were not as developed in their moral judgement as female respondents.
8. There was no statistically significant difference at the 0.05 level between athlete scores and nonathlete scores on moral judgment as measured by the Principled Morality Index Score. This meant that there was no significant difference in moral judgment between athletes and nonathletes.

9. There was no statistically significant difference at the 0.05 level between males and female scores on moral judgment as measured by the Principled Morality Score. This meant that there was no significant difference in moral judgment between male and female respondents.

10. There was no statistically significant differences at the 0.05 level between male athletes as compared with female athletes, male nonathletes and female nonathletes on moral judgment as measured by the Principled Morality Score. This meant that there was no significant difference in moral judgment between the male athletes, and the female athletes and nonathlete sample.

11. There was no statistically significant differences at the 0.05 level between female athletes and male and female nonathletes on moral judgment as measured by the Principled Morality Score. This meant that there was no significant difference in moral judgment between the female athletes, and the male athletes and nonathlete sample.

Conclusions

The results and experience gained from this investigation supported the following conclusions and suggestions:

1. The Davison scaling analysis did reveal a significant difference in moral judgment between athletes and nonathletes, although the sample for student athletes comprised 34 students. The principled reasoning score of the sample was significantly lower than reported Defining Issues Test norms (rest, 1986). This may have been an artifact of a relatively small sample size or the result of uncontrolled variables. There could be more specific analysis by
sample was significantly lower than reported Defining Issues Test norms (rest, 1986). This may have been an artifact of a relatively small sample size or the result of uncontrolled variables. There could be more specific analysis by individual sport. Given that there are fourteen intercollegiate sports at the University of Nevada, Las Vegas, and only four sports were sampled for the purposes of this study, expansion of the testing by each sport would be useful.

2. Coaching staff was not actively involved in this study except for the logistics of arranging for actually proctoring the Defining Issues Test and Biographical Questionnaire. Greater involvement by the coaching staff could prove advantageous in order to communicate the cognitive development paradigm, provide support from within the individual sports, and most importantly, establish a critical link for personal development of team members.

3. The Defining Issues Test was given at the end of the Spring semester of 1992 on a one-time basis. With the support of coaching staffs, this test could easily be given on an annual basis. In doing so, a pre and post analysis could be established for students as well as useful assessment for intercollegiate athletic teams and individual awareness.

4. Many students who took part in this study inquired as to the results of their individual or team principled reasoning scores. The results of taking the Defining Issues Test, on an individual or team basis, could be shared with students and used as a springboard to discuss their interpretation of social justice. In doing so, moral development may be furthered through personal involvement and the application of personal moral situations.

5. Rest (1986) advocated that moral judgment development occurs in concern with general social development as opposed to specific moral experiences (i.e., moral education programs, moral crises, moral issues). The Defining Issues Test scores may serve as indirect indicators of general social development. There is a window of opportunity to possibly work with a formal setting in which to administer the Defining Issues Test, yet utilize social involvement in fostering development in moral judgment.
Recommendations

Considering the results and limitations of this study, the following recommendations for future study have been made:

1. Replicate this investigation with comparable institutions (size, number of intercollegiate sports, athletic conference) to increase the sample size and validate the present findings.

2. Study additional variables such as the intensity of sports experience (noncontact, contact, collision), length of sports exposure, aggression, class, and sport orientation (individual, dual or team sport) on moral judgment.

3. Administer the Defining Issues Test to a larger sample within each intercollegiate sport in order to allow for more specific analysis within each sport.

4. Administer the Defining Issues Test on an annual basis to allow for a pre and post test and longitudinal analysis.
Figure 2. Athlete and nonathlete Defining Issues Test stage scores.
Figure 1. Male and female Defining Issues Test stage scores.
APPENDIX I  RESTS DEFINING ISSUES TEST

Rest’s (1988) Reliability & Validity
Identification Number Coding
The Defining Issues Test
The Defining Issues Test Answer Sheet
Moral judgment is a psychological construct that cannot be validated or invalidated by a single kind of finding. It is a construct with many empirical implications. It is validated by a variety of studies and findings (or by "construct" validation). What follows is a brief outline of the treatment of reliability and validity, discussed in terms of (1) face validity, (2) test-retest reliability, (3) internal consistency, (4) criterion group differences, (5) longitudinal change, (6) convergent-divergent correlations, (7) experimental enhancement, (8) resistance to faking, (9) and internal structure.

**Face validity.** Like most other tests of moral judgment, the DIT task itself obviously involves making judgments about moral problems (unlike, say, the interpretation of ink-blots or story completions which are indirect ways of assessing psychological variables). The DIT does not only ask what line of action the subject favors (i.e., to steal or not steal a drug), but is concerned with a subject's reasons behind the choice.

**Reliability.** A review of several studies by Davison and Robbins (1978) concludes that the test-retest reliabilities for the P and D scores are generally in the high .70s or .80s, and that Cronbach's Alpha index of internal consistency is generally in the high .70s. More specific information is given in Tables 6.1 and 6.2 below, adapted from Davison and Robbins (1978).
Table 20
Rest's (1988) Test-Retest Correlations on the 6-Story DIT

<table>
<thead>
<tr>
<th>DIT Scores</th>
<th>A</th>
<th>B</th>
<th>Sample B1</th>
<th>B2</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>.82</td>
<td>.76</td>
<td>.81</td>
<td>.71</td>
</tr>
<tr>
<td>D</td>
<td>.87</td>
<td>.76</td>
<td>.92</td>
<td>.67</td>
</tr>
<tr>
<td>2</td>
<td>.44</td>
<td>.62</td>
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<td>5b</td>
<td>.60</td>
<td>.51</td>
<td>.49</td>
<td>.56</td>
</tr>
<tr>
<td>6</td>
<td>.72</td>
<td>.54</td>
<td>.57</td>
<td>.49</td>
</tr>
</tbody>
</table>

Note: The table is read as follows: The test-retest correlation of the P score in Sample A is .82.

Sample A in the table above consisted of 123 subjects pooled together from various moral education projects, many from the control or comparison groups. The interval between testings varied from one week to five months, most typically in the two or three month range. Subjects ranged in age from 16 to 56. Thirty eight had junior high school education, 24 had a senior high school education, 34 a college education, and 27 had some graduate school. Although this composite group can be used to estimate test-retest stability, some shifting may have been due to real developmental change over 5 months or to some effects of the educational program.

Sample B contained 19 ninth graders (called B1) from the Rest, 1974 study, and 33 Australian college students from the 1975 study by McGeorge (called B2). Both of these groups were administered the DIT twice over a 2 to 3 week period, and the subjects were not part of the educational intervention. Correlations listed under "B" combine both samples, under "B1" are calculated on the ninth graders alone, and under "B2" [on] the college students [alone].

As can be seen from Table 20, the major indices of the DIT (the P and D scores) are generally in the .70s and .80s, the stage scores (Stage 2, 3, 4, 5a, 5b, 6) are generally lower—in the .50s and .60s. Therefore, much caution needs to be exercised using stage scores. I recommend using the stage scores only when the 6-story form has been used, and only when the information is presented in terms of group means or when the standard error of measurement has been taken into account. . . .
Table 21 presents the estimated standard error of measurement for each score. The units in the table are compatible with the units expressed in the computer printout (that is, the P score is converted to percent units, but other scores are given in "raw" units). These values are somewhat lower than the values reported in the Rest, 1975 study, but the ones reported in Table 9 are based on larger samples. When analyzing changes in individual subjects, the difference between testings should at least exceed these values if the change is to be regarded as more than test instability.

Table 21
Rest's (1988) Standard Error of Measurement

<table>
<thead>
<tr>
<th>Form</th>
<th>P</th>
<th>D</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5a</th>
<th>5b</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-Story</td>
<td>7.1</td>
<td>3.6</td>
<td>2.5</td>
<td>4.1</td>
<td>4.7</td>
<td>3.9</td>
<td>2.1</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Note: This table is read as follows: The standard error of measurement for the P score on the 6-story form is 7.1 units.

Cronbach’s Alpha was used as a measure of internal consistency, a somewhat conservative estimator. It was calculated by finding a stage score for each story, then looking at the consistency across all stories on that score. On the sample of 160 subjects used in the Rest, et al, 1974 study, alpha was .77 for the P index and .79 for the D index. Alpha for the P index on the 1,080 sample was also .77.

Criterion Group Validity. The basic strategy of criterion group validation is to demonstrate that groups of subjects who ought to have different scores on a measure do in fact have different scores. On a measure purporting to measure the development of moral judgment, we would expect (on a common sense basis) that world-renowned moral philosophers would have high scores. Since this group is difficult to access, I settled for the next-best "expert" group, a group of Ph.D. students in moral philosophy and political science. Because of their chosen field of scholarly work (and their selection into these programs), it seems reasonable to expect sophistication in moral reasoning from this group. At the other extreme, I chose the youngest and least educated group that could take the test: ninth graders. Because of their young age and lack of education relative to the doctoral students, one would expect the scores of the ninth graders to be lower than those of the doctoral students. In between these two extremes were groups of high school subjects and college subjects. Many studies of this sort are reviewed in the 1979 book, Chapter 5 and in the 1986 book, Chapter 2. Group differences are highly statistically significant, accounting for nearly 50% of the variance in DIT scores in some studies.

Longitudinal validity. A crucial test of any development measure is to show change in the direction of "higher stages" for subjects who are retested. Several longitudinal studies are discussed in the 1979 book, Chapter 5, reporting significant upward trends over four years at three testings (F= 20.1, p < .001) for the P score and for the D score. Similarly,
generational or cultural change, but rather can be attributed to individual ontogenetic change. Also, studies indicate that the longitudinal trends cannot be attributed to testing effects or sampling bias. In the 1986 book, 10 longitudinal studies are cited which show significant upward trends. Among the most interesting study is a report of a ten year longitudinal study showing significant changes over time, but furthermore tracing the changes to education and to life experiences. In fact, the life experience codes correlate .6 with the DIT scores of young adulthood.

Convergent-divergent correlations. The basic strategy here is to show that variables which are theoretically more similar to moral judgment will have higher correlations with the DIT than variables which are theoretically dissimilar. In the 1979 book, Chapter 6 presents hundreds of correlations, so only a brief summary is given. With other measures of moral reasoning (various versions of Kohlberg’s test and the Comprehension of Moral concepts test) the correlations go up to the .60s and .70s, averaging about .50. With other measures of cognitive development and intelligence (no distinctively moral reasoning) the correlations are generally a little lower, in the .20s to .50s range, averaging .36. With various measures of attitudes and personality, the correlations are rarely high and usually non-significant or inconsistent. With demographic or sociological variables such as sex, socioeconomic class, and political party the correlations are usually nonsignificant or very low. Therefore, from the pattern of correlations obtained on the DIT with a great variety of variables, the empirical relationships do tend to follow the theoretical similarity-dissimilarity of moral judgment with other constructs.

The discriminant validity of the DIT (i.e., its ability to produce unique information not accounted for by other variables) is supported by several other kinds of studies (see 1979 book, Chapters 6, 7, and 9; see 1986 book, chapter 5). Some studies show that even when other variables (e.g., IQ, age, SES, attitudes) are controlled or statistically partialled out, the DIT still significantly predicts to behavior (G. Rest, 1977; McColgan, 1975; Marston, 1978; Fromning and Cooper, 1976) -- in other words, there is useful information in DIT scores that is not shared in common with major other variables. Another study (see 1979 book, Chapter 6) examined how variables clustered from 6 measures administered to the same subjects: although there was some degree of correlation among all variables, the DIT tended to cluster with another moral reasoning variable, two intelligence tests clustered and two political attitude tests clustered. In other words, variables from similar constructs tended to cluster together -- and moral judgment clustered differently from the intelligence tests and different from the political attitudes tests.

Validation through experimental enhancement studies. If the DIT is measuring moral judgment, and if moral judgment is a distinctive domain of development, then experiences which focus on the enhancement of moral reasoning ought to increase DIT scores. At the same time, if the DIT is assessing something fundamental (like a person’s basic problem-solving strategies in dealing with moral dilemmas) and is not measuring a surface phenomena (like learning a special vocabulary or learning particular slogans) then we would expect progress in stimulating moral development to be slow and gradual. Indeed, intervention studies (reviewed in 1986, Chapter 3) do give us that picture of the change in

DIT scores by educational interventions. The movement of the experimental groups in these moral education interventions is slow (even if significantly greater than in the control groups), amount of change was less than in the longer-term longitudinal studies, and change induced by educational intervention requires a heavy focus on moral problem solving.
A particularly interesting study compared an ethics class with a philosophy class in logic (Panowitsch-Balkcum study, Chapter 7, 1979). It was found that the logic class moved subjects up on a logic test but not on the DIT, whereas the ethics class moved subjects up on the DIT but not on the logic test. This indicates that each test (the DIT, the logic test) is sensitive to specific domains of cognitive development and that specifically focused interentions are more effective when focused on a specific domain.

Faking studies. McGeorge (1975) asked one group of subjects to "fake good" on the DIT by pretending that they were taking the test to show "the highest principles of justice." McGeorge asked another group to "fake bad", and a third group to take the DIT under regular conditions. He found that under the "fake bad" conditions, scores were lower than under the usual conditions; but under the "fake good" conditions, scores were no higher than under the normal test conditions. These findings suggest that under the usual conditions, subjects are giving their best notion of the highest principles of justice, and that the test-taking set of "fake good" does not appreciably increase scores. Other studies have introduced further complications into their designs (e. g., Yussen, 1976; Bloom, 1978; Emler, et al, 1983; Barnett, 1986), but these studies do not change the basic point that under normal test conditions, the DIT is eliciting a person's best notion of justice and fairness.

Validation through studies of internal structure. Davison, et al, (1978, Chapter 8 in the 1979 book) 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.

Five-Digit Identification Number Scale for Coding the Defining Issues Test

Digit 1               Gender and age of subjects:
  0=Female, age 18     5=Male, age 18
  1=Female, age 19     6=Male, age 19
  2=Female, age 20     7=Male, age 20
  3=Female, age 21     8=Male, age 21
  4=Female, age 22     9=Male, age 22

Digit 2               Subjects' athletic involvement:
  0=Nonathlete
  1=One season of collegiate athletic involvement
  2=Two seasons of collegiate athletic involvement
  3=Three seasons of collegiate athletic involvement
  4=Four seasons of collegiate athletic involvement Etc.

Digit 3               Subjects' athletic sport
  0=Nonathlete
  1=Women's basketball
  2=Softball
  3=Baseball
  4=Soccer

Digit 4 and 5         Uniquely identifies subjects
  01=First subject
  02=Second subject
  03=Third subject
  04=Fourth subject Etc.
Opinions about Social Problems

The purpose of this questionnaire is to help us understand how people think about social problems. Different people have different opinions about questions of right and wrong. There are no "right" answers to such problems in the way that math problems have right answers. We would like you to tell us what you think about several problem stories.

You will be asked to read a story from this booklet. Then you will be asked to mark your answers on a separate answer sheet. More details about how to do this will follow. But it is important that you fill in your answers on the answer sheet with a #2 pencil. Please make sure that your mark completely fills the little circle, that the mark is dark, and that any erasures that you make are completely clean.

The Identification Number at the top of the answer sheet may already be filled in when you receive your materials. If not, you will receive special instructions about how to fill in that number.

In this questionnaire you will be asked to read a story and then to place marks on the answer sheet. In order to illustrate how we would like you to do this, consider the following story:

**FRANK AND THE CAR**

Frank Jones has been thinking about buying a car. He is married, has two small children and earns an average income. The car he buys will be his family's only car. It will be used mostly to get to work and drive around town, but sometimes for vacation trips also. In trying to decide what car to buy, Frank Jones realized that there were a lot of questions to consider. For instance, should he buy a larger used car or a smaller new car for about the same amount of money? Other questions occur to him.

We note that this is not really a social problem, but it will illustrate our instructions. After you read a story you will then turn to the answer sheet to find the section that corresponds to the story. But in this sample story, we present the questions below (along with some sample answers). Note that all your answers will be marked on the separate answer sheet.
First, on the answer sheet for each story you will be asked to indicate your recommendation for what a person should do. If you tend to favor one action or another (even if you are not completely sure), indicate which one. If you do not favor either action, mark the circle by "can't decide."

Second, read each of the items numbered 1 to 12. Think of the issue that the item is raising. If that issue is important in making a decision, one way or the other, then mark the circle by "great." If that issue is not important or doesn't make sense to you, mark "no." If the issue is relevant but not critical, mark "much," "some," or "little" -- depending on how much importance that issue has in your opinion. You may mark several items as "great" (or any other level of importance) -- there is no fixed number of items that must be marked at any one level.

Third, after you have made your marks along the left hand side of each of the 12 items, then at the bottom you will be asked to choose the item that is the most important consideration out of all the items printed there. Pick from among the items provided even if you think that none of the items are of "great" importance. Of the items that are presented there, pick one as the most important (relative to the others), then the second most important, third, and fourth most important.

**SAMPLE ITEMS and SAMPLE ANSWERS:**

**FRANK AND THE CAR:**

- buy new car
- can't decide
- buy used car

<table>
<thead>
<tr>
<th>Great</th>
<th>Some</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Much</th>
<th>Little</th>
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<tbody>
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</tbody>
</table>

1. Whether the car dealer was in the same block as where Frank lives.
2. Would a used car be more economical in the long run than a new car.
3. Whether the color was green, Frank's favorite color.
4. Whether the cubic inch displacement was at least 200.
5. Would a large, roomy car be better than a compact car.
6. Whether the front fenders were differential.

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<table>
<thead>
<tr>
<th>Most important item</th>
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<tr>
<td>Second most important</td>
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<td>Third most important</td>
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Note that in our sample responses, the first item was considered irrelevant; the second item was considered as a critical issue in making a decision; the third item was considered of only moderate importance; the fourth item was not clear to the person responding whether 200 was good or not, so it was marked "no"; the fifth item was also of critical importance; and the sixth item didn't make any sense, so it was marked "no".

Note that the most important item comes from one of the items marked on the far left hand side. In deciding between item #2 and #5, a person should reread these items, then put one of them as the most important, and the other item as second, etc.
HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife. Should Heinz steal the drug?

ESCAPED PRISONER

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For eight years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his own profits to charity. Then one day, Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison eight years before, and whom the police had been looking for. Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison?

NEWSPAPER

Fred, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could express many of his opinions. He wanted to speak out against the use of the military in international disputes and to speak out against some of the school's rules, like the rule forbidding boys to wear long hair.

When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would turn in all his articles for the principal's approval. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks.

But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected to Fred's opinions. They phoned the principal telling him that the newspaper was unpatriotic and should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school. Should the principal stop the newspaper?
DOCTOR'S DILEMMA

A lady was dying of cancer which could not be cured and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer like morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway. Should the doctor give her an overdose of morphine that would make her die?

WEBSTER

Mr. Webster was the owner and manager of a gas station. He wanted to hire another mechanic to help him, but good mechanics were hard to find. The only person he found who seemed to be a good mechanic was Mr. Lee, but he was Chinese. While Mr. Webster himself didn't have anything against Orientals, he was afraid to hire Mr. Lee because many of his customers didn't like Orientals. His customers might take their business elsewhere if Mr. Lee was working in the gas station.

When Mr. Lee asked Mr. Webster if he could have the job, Mr. Webster said that he had already hired somebody else. But Mr. Webster really had not hired anybody, because he could not find anybody who was a good mechanic besides Mr. Lee. Should Mr. Webster have hired Mr. Lee?

STUDENT TAKE-OVER

Back in the 1960s at Harvard University there was a student group called Students for a Democratic Society (SDS). SDS students were against the war in Viet Nam, and were against the army training program (ROTC) that helped to send men to fight in Viet Nam. While the war was still going on, the SDS students demanded that Harvard end the army ROTC program as a university course. This would mean that Harvard students could not get army training as part of their regular course work and not get credit for it towards their degree.

Harvard professors agreed with the SDS students. The professors voted to end the ROTC program as a university course. But the President of the University took a different view. He stated that the army program should stay on campus as a course.

The SDS students felt that the President of the University was not going to pay attention to the vote of the professors, and was going to keep the ROTC program as a course on campus. The SDS students then marched to the university's administration building and told everyone else to get out. They said they were taking over the building to force Harvard's President to get rid of the army ROTC program on campus for credit as a course.

Were the students right to take over the administration building?

Please make sure that all your marks are dark, fill the circles, and that all erasures are clean.

THANK YOU.
DEFINING ISSUES TEST
University of Minnesota
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HEINZ AND THE DRUG: O Should Steal O Can't Decide O Should not steal

1. Whether a community's laws are going to be upheld.
2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?
3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?
4. Whether Heinz is a professional wrestler, or has considerable influence with professional wrestlers.
5. Whether Heinz is stealing for himself or doing this solely to help someone else.
6. Whether the druggist's rights to his invention have to be respected.
7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.
8. What values are going to be the basis for governing how people act towards each other.
9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.
10. Whether the law in this case is getting in the way of the most basic claim of any member of society.
11. Whether the druggist deserves to be robbed for being so greedy and cruel.
12. Would stealing in such a case bring about more total good for the whole society or not.

Most important item © ® ® © © ® ® ® ® ® © ®
Second most important © ® © ® ® ® ® ® ® ® ® ®
Third most important © ® ® ® ® ® ® ® ® ® ® ®
Fourth most important © © ® ® ® ® ® ® ® ® ® ®

ESCAPED PRISONER: O Should report him O Can't decide O Should not report him

1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
2. Everytime someone escapes punishment for a crime, doesn't that just encourage more crime?
3. Wouldn't we be better off without prisons and the oppression of our legal system?
4. Has Mr. Thompson really paid his debt to society?
5. Would society be failing what Mr. Thompson should fairly expect?
6. What benefits would prisons be apart from society, especially for a charitable man?
7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?
8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
9. Was Mrs. Jones a good friend of Mr. Thompson?
10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
11. How would the will of the people and the public good best be served?
12. Would going to prison do any good for Mr. Thompson or protect anybody?

Most important item © ® ® ® © ® ® ® ® ® © ®
Second most important © ® ® ® © ® ® ® ® ® ®
Third most important © ® ® ® ® ® ® ® ® ® ® ®
Fourth most important © ® ® ® ® ® ® ® ® ® ® ®

PLEASE DO NOT WRITE IN THIS BOX

144722
NEWSPAPER: 〇 Should stop it 〇 Can't decide 〇 Should not stop it

1. Is the principal more responsible to students or to parents?
2. Did the principal give his word that the newspaper could be published for a long time, or did he just promise to approve the newspaper one issue at a time?
3. Would the students start protesting even more if the principal stopped the newspaper?
4. When the welfare of the school is threatened, does the principal have the right to give orders to students?
5. Does the principal have the freedom of speech to say "no" in this case?
6. If the principal stopped the newspaper would he be preventing full discussion of important problems?
7. Whether the principal's order would make Fred lose faith in the principal.
8. Whether Fred was really loyal to his school and patriotic to his country.
9. What effect would stopping the paper have on the student's education in critical thinking and judgment?
10. Whether Fred was in any way violating the rights of others in publishing his own opinions.
11. Whether the principal should be influenced by some angry parents when it is the principal that knows best what is going on in the school.
12. Whether Fred was using the newspaper to stir up hatred and discontent.

Most important item: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Second most important: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Third most important: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Fourth most important: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

DOCTOR'S DILEMMA: 〇 He should give the lady an overdose that will make her die 〇 Can't decide 〇 Should not give the overdose

1. Whether the woman’s family is in favor of giving her the overdose or not.
2. Is the doctor obligated by the same laws as everybody else if giving an overdose would be the same as killing her.
3. Whether people would be much better off without society regimenting their lives and even their deaths.
4. Whether the doctor could make it appear like an accident.
5. Does the state have the right to force continued existence on those who don't want to live.
6. What is the value of death prior to society's perspective on personal values.
7. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think.
8. Is helping to end another's life ever a responsible act of cooperation.
9. Whether only God should decide when a person's life should end.
10. What values the doctor has set for himself in his own personal code of behavior.
11. Can society afford to let everybody end their lives when they want to.
12. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live.

Most important item: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Second most important: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Third most important: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Fourth most important: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
WEBSTER: 〇 Should have hired Mr. Lee 〇 Can't decide 〇 Should not have hired him

1. Does the owner of a business have the right to make his own business decisions or not?
2. Whether there is a law that forbids racial discrimination in hiring for jobs.
3. Whether Mr. Webster is prejudiced against orientals himself or whether he means nothing personal in refusing the job.
4. Whether hiring a good mechanic or paying attention to his customers' wishes would be best for his business.
5. What individual differences ought to be relevant in deciding how society's rules are filled?
6. Whether the greedy and competitive capitalistic system ought to be completely abandoned.
7. Do a majority of people in Mr. Webster's society feel like his customers or are a majority against prejudice?
8. Whether hiring capable men like Mr. Lee would use talents that would otherwise be lost to society.
9. Would refusing the job to Mr. Lee be consistent with Mr. Webster's own moral beliefs?
10. Could Mr. Webster be so hard-hearted as to refuse the job, knowing how much it means to Mr. Lee?
11. Whether the Christian commandment to love your fellow man applies to this case.
12. If someone's in need, shouldn't he be helped regardless of what you get back from him?

Most important item 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇
Second most important 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇
Third most important 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇
Fourth most important 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇

STUDENTS: 〇 Take it over 〇 Can't decide 〇 Not take it over

1. Are the students doing this to really help other people or are they doing it just for kicks.
2. Do the students have any right to take over property that doesn't belong to them.
3. Do the students realize that they might be arrested and fined, and even expelled from school.
4. Would taking over the building in the long run benefit more people to a greater extent.
5. Whether the president stayed within the limits of his authority in ignoring the faculty vote.
6. Will the takeover anger the public and give all students a bad name.
7. Is taking over a building consistent with principles of justice.
8. Would allowing one student take-over encourage many other student take-overs.
9. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative.
10. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people.
11. Are the students following principles which they believe are above the law.
12. Whether or not university decisions ought to be respected by students.

Most important item 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇
Second most important 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇
Third most important 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇
Fourth most important 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇 〇
APPENDIX II  BIOGRAPHICAL QUESTIONNAIRE
A research study is being conducted at the University of Nevada, Las Vegas to assist us understand how students think about social problems. The aim of this investigation is to discover the attitudes of both athletes and nonathletes.

You are one of the university students who has been chosen to be a participant in this investigation. We are asking for your cooperation; however, your participation is voluntary.

In filling out this Questionnaire and answering the attached test, please do not write your name on any part of the forms. The information you submit is strictly confidential, and no student's identity will be known. Please complete the information below. Thank you for your participation!

BACKGROUND
Please circle the appropriate number or fill in the answer.

A. Sex
   1. Male
   2. Female

B. Age ______

C. Ethnic Origin
   1. Caucasian
   2. African/American
   3. Spanish surname
   4. Native American
   5. Asian/American
   6. Other: _______________________

D. Religious Affiliation
   1. Once a week or more
   2. Once a month or more
   3. Once a year or more
   4. Less than once a year

E. Current grade level at UNLV
   1. Freshman
   2. Sophomore
   3. Junior
   4. Senior

F. Junior College Transfer
   1. Yes
   2. No

G. Number of Seasons of Collegiate Participation in Athletics, if any: _____
H. Sport in which you participated on a collegiate level, if any:
1. Baseball
2. Softball
3. Basketball
4. Other: ____________________

I. Number of years residing within Nevada: _______

J. Are you on an athletic scholarship?
1. Yes
2. No

K. How many full-time semesters at UNLV have you completed (including Spring semester, 1992)? _______

K. Do you receive financial assistance through Financial Services?
1. Yes
2. No

L. If you have a major, what is it? __________________________

REMINDER: All your responses will be kept strictly confidential. Only group summary statistics will be used; under no circumstances will information be reported on an individual basis.

ATTACHED YOU WILL FIND AN INSTRUCTION BOOKLET AND ANSWER SHEETS. PLEASE TURN TO THE BOOKLET AND BEGIN

Comments or Thoughts are welcome. After you have completed the test, I would welcome your opinion. Please use the space below or the back of this questionnaire.

Comments and/or Thoughts:
UNIVERSITY OF NEVADA-LAS VEGAS

STATEMENT OF EXEMPTION
from review by
Human Subject Committees

The Department of Health and Human Services (DHHS) published in the Federal Register of January 26, 1981, its amended regulations governing research involving human subjects, altering the scope of previous Department regulations by exempting categories of research which present little or no risk or harm to human beings. At UNLV the Human Subject Institutional Review Board accepted the exempted research categories. Exemption from Human Subject Committee review and approval must be based on the exemptions specified in the Federal Regulations of January 26, 1981. The responsibility for claiming the exemption can rest at the departmental level, if the department files a departmental assurance with the Office of the Graduate Dean (option 1). Otherwise, the responsibility will rest in the Graduate Dean's Office, either with the Graduate Dean or the Chairman of the appropriate Human Subject Committee (option 2).

This form will assist researchers and departments who have chosen option 1 in certifying proposed research as exempt and specifying under which of five categories listed in the Federal Register the exemption occurs (see reverse). In questionable cases, investigators and/or department chairs are strongly urged to consult the appropriate Human Subjects Committee. This completed and signed form is to be retained in the department. In addition:

1) For extramurally funded research projects, a copy must be forwarded to the Office of the Graduate Dean so that an institutional certification (DHHS 596) may accompany the application when mailed to the funding agency.

2) Originals or copies of this form must be forwarded by department chairmen to the Graduate Dean's Office, along with the informed consent form.

The above stated policy is effective as of January 1, 1982.

INVESTIGATOR  ELIZABETH BALDIZAN  DEPARTMENT or Unit  ED. ADM. & HIGHER ED.

TITLE of Study  MORAL DEVELOPMENT: A COMPARATIVE ANALYSIS OF STUDENT ATHLETES AND NON-ATHLETES AT THE UNIVERSITY OF NEVADA, L.V

DURATION of Study  SPRING 92 - FALL 92  SPONSOR

CITATION of Exempt Category (identify by number as shown on back of page)  2

DESCRIPTION of Study and REASON for including it in the exempt category cited:
(attach sheet if more space is needed)

ELIZABETH BALDIZAN
Signature of Investigator

March 24, 1992
Date

Chairman or Graduate Dean, or Human Subjects Committee Chairman

3/24/92
APPENDIX IV. LETTERS OF SUPPORT
January 31, 1992

Dr. Anthony Saville
Professor, Educational Administration
and Higher Education
University of Nevada, Las Vegas
Las Vegas, NV 89154

Dear Dr. Saville,

Please accept this letter as my endorsement to the study currently being conducted by Ms. Liz Baldizan for partial fulfillment of her doctorate degree through the Department of Educational Administration and Higher Education. From what I have observed from her Research Project Description and the instrument she plans to utilize, I deem it to be a well timed and appropriate study for her profession.

I have given Liz permission to administer her instrument to student athletes and non-athletes enrolled through the Student Development Center. It is my belief that a study of this nature could not come at a better time at this institution.

Please know that I fully support Ms. Baldizan's study and will gladly respond in more detail should you deem it necessary.

Sincerely,

James R. Kitchen
Associate Dean of Students

JRK:ps
March 17, 1992

Liz Baldizan
University of Nevada, Las Vegas
4505 Maryland Parkway
Las Vegas, Nevada 89154

Dear Liz,

I am pleased to notify you that the Research Committee of ASJA has voted to support your research on "Assessing Moral Development of Student Athletes and Nonathletes", by awarding you a grant in the amount of $391.00.

A copy of this letter will be sent to the ASJA treasurer, Dave Bergen, which will authorize release of funds to you in the amount awarded by the Committee.

As you are aware, an expectation of the grant process is that award recipients will present research results to the Association by delivering a presentation at the ASJA annual conference or through development of an article for publication in the ASJA newsletter. Please indicate your willingness to formally share your research results with the Association by signing the agreement at the bottom of this letter and returning a signed copy to: Saunie Schuster, ASJA Research Chairperson, 208 Ohio Union, 1739 N. High Street, Columbus, Ohio 43210. Please retain the second copy of the letter for your records.
Once again, congratulations. We are delighted to support the ASJA membership in research in the field of student judicial affairs.

Sincerely,

Saunie Schuster
ASJA Research Committee

cc: Tim Brooks, President
    Dave Bergen, Treasurer

*************************************************************************
I understand that a condition of receipt of financial support for research from the Association for Student Judicial Affairs is to provide research results to the ASJA membership.
Signed: [Signature]
Date: [Handwritten date]

*************************************************************************
PLEASE NOTE:

Page(s) missing in number only; text follows. 
Filmed as received.
BIBLIOGRAPHY


Kohlberg, L. (1976, October). Does the college have a responsibility for the moral development of its students? Paper presented at Dartmouth College, Hanover, New Hampshire.


