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CONSISTANCY OF MORAL JUDGEMENTS ON EGO-INVOLVING MORAL DILEMMAS.

THE UNIVERSITY OF OKLAHOMA, PH.D., 1979

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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

CONSISTANCY OF MORAL JUDGEMENTS ON EGO-INVOLVING MORAL DILEMMAS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

DARENDIA MCGEE

Norman, Oklahoma

1979

CONSISTANCY OF MORAL JUDGEMENTS ON

EGO-INVOLVING MORAL DILEMMAS

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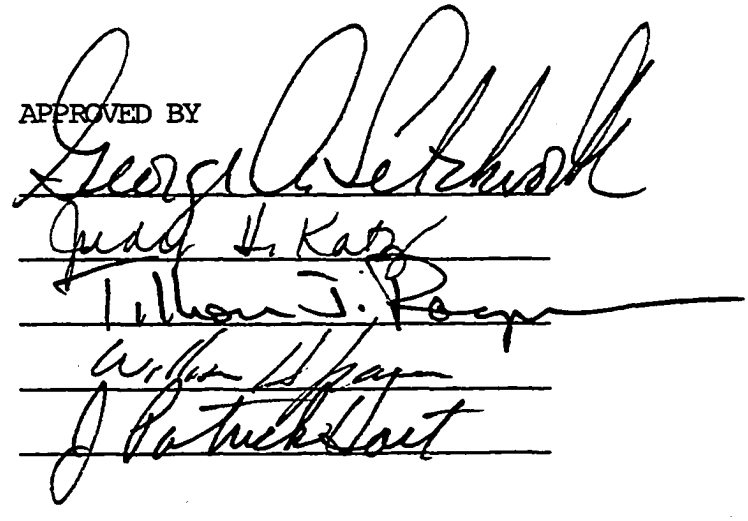

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CONSISTANCY OF MORAL JUDGEMENTS ON EGO-INVOLVING MORAL DILEMMAS

Moral Development

Society provides an arena for an array of moral decisions with which individuals are faced. Cognitive moral development theory provides a framework for understanding these moral decisions, but does not account for some of the individual factors which may interact with moral reasoning. This study examines the influence of the individual factors, level of moral reasoning, ego-involvement, and attitude on situational moral reasoning.

The conceptualization of moral development as a function of progressive cognitive stages has its roots in the work of Jean Piaget (1932). Piaget's conceptual framework identified three stages, each requiring a more progressively sophisticated cognitive structure than prior stages in order to internalize the stage reasoning and consequently, exhibit the stage behaviors. This stage progression concept is reflected in the moral development work of Lawrence Kohlberg (1958), 1963, 1969, 1975). Kohlberg expanded the three stage framework of Piaget through further refinement of those stages, and also by the identification of dual substages for each of the three basic stages.

The relationship between cognitive and moral developmental stages has been supported by other research (Brooks-Walsh and Sullivan, 1973, Jantz, 1973, Tomlinson-Keasey and Keasey, 1974, and Weinrich, 1975). The facilitating and constraining effects of cognitive development on moral development were explored by Kuhn, Langer, Kohlberg, and Haan (1971). Mays (1975) determined that cognitive development parallels or preceeds moral development, while Leming (1975) found age and empathy to be the primary prediction variables for stage of moral reasoning and that levels of moral development were not shown to advance significantly over levels of cognitive development. The influence of cognitive levels on moral reasoning has, therefore, been established in the basic hierarchial stage structure of development.

The process by which an individual progresses from one stage to another was the subject of work by Turiel (1966) who found that an individual is more likely to exhibit change when exposed to moral reasoning at one stage above the previously exhibited reasoning stage. Supportive research to this contention was provided by Keasey (1973). Turiel (1973, 1974) determined change from one stage to the next to be a function of self regulated "progressive equilibration" whereby the developmental process is continually directed toward increasing equilibrium with each of the hierarchial stages seen to be progressively more equilibriated. Thus the environmental stimuli of reasoning at one stage above the individual's level of reasoning produces within the individual a state of conflict or disequilibrium which is resolved when the current mode of thinking is examined and a new expanded mode developed. There is an assumption that this conflict state is a cross situational phenomenon.

Though the cross-situational assumption has not been tested, there is research which illuminates certain individual factors influencing moral judgements and, therefore, questioning the consistency assumption of cross-situational moral reasoning. Rest (1975) suggested that there is an interrelationship between structural or stage factors, task factors, and individual subject performance factors which must all be considered to account for moral decisions. These factors, according to Rest, account for the inability to identify an individual as consistently functioning at any given stage. Rest, Cooper, Masanz, and Anderson, (1974) emphasized the necessity for considering the percentage of time that an individual was operating at any given level rather than stage typing at that level. Rest (1975) pointed out that since individuals do not consistently operate at a given stage, his Defining Issues Test (DIT) yields a score which is indicative of the percentage of time that an individual is making moral decisions using principled reasoning. There still remain considerations for determining moral reasoning. It is with the examination of future research data that Rest feels a clarification of individual factors will evolve which must be considered in the study of moral decision making.

Leming (1974) questions the theoretical assumptions of consistency across various forms of moral reasoning. Specifically Leming speculated that raising an individual's level of moral reasoning in one area may not necessarily cause a general overall elevation in moral reasoning. The problem of stage stability must consider the distinction between the judgement mode and deliberation mode of moral reasoning. Baier (1965) identifies the judgement mode as a type of rational for determining the appropriateness of a behavior after it has occurred and the deliberation

mode as one of planning the most desirable behavior before any action has taken place. A secondary consideration suggested by Leming (1974) is that of classical and practical dilemmas. A classical dilemma is a standard one as used by Kohlberg occurring outside the life space of an individual, while a practical one is that which is immediate to the individual involved in the dilemma. Leming finds the Kohlberg rational for moral assessment to be in the realm of a classical judgement mode rather than the practical deliberation mode.

From the previous research it would seem that the theoretical assumptions underlying stage consistency may be questionable due to alternative explanatory concepts such as "moral thought structure," "individual subject performance," and "task factors" which may influence moral decisions, thus affecting stage consistency. Research has not supported the assumption of stage consistency (Fishkin, Keiston, and MacKinnon, 1973, and Hudgins and Prentice, 1973).

What are factors which may influence "moral thought structure," "individual subject performance," "task factors" and "practical deliberation"? Haan (1975) found that a sample of college students used a different level of reasoning in a civil disobedience situation than they did in hypothetical dilemmas. Scharf (1971, 1973) found that prison inmates exhibited more primitive moral reasoning in dealing with prison related dilemmas than in the standard moral dilemmas. Leming (1974) suggested that the effectiveness of moral education programs would be determined by their ability to focus on naturally occurring situations within the life-space of the students. Keasey (1973) found moral judgement to be influenced by consistency with individual belief systems.

Individual involvement in an issue may be a factor influencing decisions concerning that issue and, therefore, affecting the concept of stage consistency.

Ego Involvement

A conceptualization for explaining the intensity of individual involvement in an attitudinal issue was referred to as ego-involvement by Sherif and Cantril (1947). A person ego-involved in a specific attitudinal issue may be expected to respond to information concerning that issue quite differently than one who is not ego-involved. The very fact that a person is ego-involved in an issue indicates that judgements concerning that issue are more consistent than one who is not ego-involved (Klein and Schoenfeld, 1941, Holt, 1945, Huntley, 1940). In a study by Cartwright (1941), subjects with extreme political positions had a smaller range of acceptance than those who were not extreme. Johnson (1955) found subjects with extreme attitudinal positions to make more negative judgements with greater confidence than those of a more moderate position.

Research in moral development has questioned the theoretical assumptions of stage consistency and suggested that the consistency assumption may be influenced by individual factors. Ego-involvement may be an effective model for testing the consistency assumption in the presence of ego-involvement which is high or low in favor of, or non-involved in, a situationally specific issue requiring judgement in a moral dilemma. In order to test the assumption of stage consistency in the presence of ego-involvement it becomes necessary to identify

a situational issue in which ego-involvement seems likely. Public issues which are the subject of legislative action and public influence provide an arena for such situationally specific issues. A public issue situationally relevant is the ratification of the Equal Rights Amendment. Attempts at ratification have resulted in demonstrations and outcries from individuals and groups reflecting a diversified spectrum of involvement in the issue.

The purpose of this research was to explore the relationships between individual factors on an issue and moral judgements made about that issue. High ego-involvement on an issue, legal equality for men and women, which is related to the Equal Rights Amendment, may influence the moral decisions that an individual makes relevant to that particular issue as compared to the moral decisions made on the classical moral dilemmas.

The current study examined moral judgements on ERA moral dilemmas of subjects classified as high or low in moral reasoning, who have high or low ego-involvement, in favor of, non-involved, or against ERA issues. The shift in principled reasoning from standard dilemmas to ERA dilemmas is examined across attitude positions and level of ERA involvement. Research examining individual factors and their influence on moral judgements (Scharf, 1971; Keasey, 1973; Leming, 1974; Rest, 1975; and Kohlberg, 1976) indicate that there will be a difference in the way subjects respond to situational moral dilemmas based on their level of ego-involvement. Secondly, in regard to attitude and level (Huntley 1940, Cartwright 1941), there will be a difference in the way subjects respond to situational moral dilemmas based on their attitude. Finally, there

will be an interaction between ego-involvement and attitude on subjects' responses to situational moral dilemmas.

Method

Subjects

Two hundred forty-eight undergraduate students were selected by voluntary participation from five education classes and one Sociology of Women class. Initial sample examination produced no significant differences between males and females, or between education and sociology classes, therefore no further distinction was made. More detailed information for the sample appears in Appendix D. Students were administered the Defining Issues Test short form (DIT), the ERA Ego-Involvement Instrument, and the ERA Moral Dilemmas. Students completed the Ego-Involvement Instrument following oral instructions to identify the most agreeable item with an "MA" and all other agreeable items with an "A", then the most objectionable item with an "MO" and all other objectionable items with an "O". Students were classified as highly ego-involved with a latitude of rejection of three or less on the ego-involvement instrument. Students were classified as taking a positive attitudinal position on the ego-involvement instrument if the most agreeable item (MA) occurred in the positive section of the instrument, items one through three. Students were classified as taking a non-involved attitudinal position if the most agreeable item (MA) occurred in the non-involvement section of the instrument, items four through six. Subjects were classified as taking a negative attitudinal position if the most agreeable item (MA) occurred in the negative section of the instrument, items seven through nine.

Students next completed the DIT and ERA Moral Dilemmas following written instructions which requested them to read a dilemma and then rank considerations concerning that dilemma by importance. Students were classified according to P scores on the DIT (Rest, 1974) with the upper fifty percent of the sample comprising the upper principled reasoning group (upper P) and the lower fifty percent comprising the lower principled reasoning group (lower P). Thus, students were classified according to P group (upper P or lower P), degree of ego-involvement (HEI or LEI), and position on the ego-involvement issue (positive, non-involved, or negative). Sample size calculations indicated a sample size of sixty subjects (five per comparision group) to be appropriate for the size effect of one half of one standard deviation at the .95 level of power (Kirk, 1968), with alpha at the .05 level. The initially large sample was obtained in order to insure an adequate number for each classification group. Two cells did not produce an adequate sample. Low ego-involvement, negative direction with high P contained three, and with low P contained four. Thus the analysis of variance was performed on an unequal cell size using a least squares solution. Students were randomly excluded down to a cell size of five except for two incomplete cells in which all available students were used resulting in a sample of fifty-seven.

Test Instruments

1. The short version of the Defining Issues Test (DIT, Appendix A) was used to assess moral development of subjects. The short version of the DIT has the same research considerations as the long version. It is not suited to those whose primary language is not English (Rest, 1974),

and it has a reading level of 11 to 13 years (McGeorge, 1973). The full model has a test retest reliability of .81 (Rest et al., 1974). The short version has a correlation of .93 with the full model (Rest et al., 1974). The Spearman-Brown Prophecy formula estimating short form reliability from the long form (Mehrens, and Lehmann, 1978) gives a minimum reliability of .87. The full model has a correlation with the Kohlberg interviews of .68 (Rest et al., 1974). Although a stage score can be calculated from the DIT, the emphasis placed by Rest (1974) for scoring is upon the P score which is the relative importance a subject gives to principled moral considerations in making moral judgements. The P score will be used in this research. The short version of the DIT yields a P score comparable to the full model, making it a practical and suitable measure of moral development when research constraints make the utilization of the full model DIT impractical.

2. The ego-involvement instrument based on the Sherif method of ordered alternatives was used to determine ego-involvement (Appendix C). The attitude questionnaire was comprised of nine statements which span a range between two extreme positions on the basic contention of the ERA issue, equal treatment under the law for males and females. Attitudinal scaling according to the method of ordered alternatives yields several measures. The latitude of acceptance (LA) is comprised of the most acceptable position (MA) plus all other acceptable (A) items indicated by the subject. The latitude of rejection (LR) is comprised of the most objectionable position (MO) plus all other objectionable items indicated by the subject. The latitude of non-commitment is comprised of all unmarked items. For the purpose of this study LR was used

to indicate high, LR three or more, or low, LR two or less, ego-involvement and the position of the MA item was used to indicate attitude, positive, non-involved, or negative. In a separate sample utilized for this research the LR as measured by the Ego-Involvement Instrument had a test-retest reliability of .39, while the MA item had a test-retest reliability of .56. This measurement technique provides a means of determining a subject's attitude on a particular issue, and also provides some index as to the level of involvement concerning that attitude. This provides the classification criteria of attitude (positive, non-involved, or negative) and level of involvement (HEI or LEI) necessary for the purposes of this research.

3. The ERA Moral Dilemmas (Appendix C) devised in the pilot research (Appendix B) were patterned after the format and scoring procedure of the DIT. The ERA Moral Dilemmas yielded scores comparable to the DIT in a pilot study. Among twenty-four females in the pilot study the ERA Moral Dilemma scores had a correlation of .55 with the DIT scores ($P<.05$). The pilot study produced test-retest reliability for the ERA Moral Dilemmas of .69 ($P<.05$). The DIT was used because it has an established relationship with Kohlberg's more complex method of determining level of moral development by stage typing (Rest et al., 1974), and because it has become a standard tool in moral development research. A significant relationship between the DIT and the ERA Moral Dilemmas contributes to an assumption of concurrent validity for the ERA Moral Dilemmas.

Results

A two (High-P, Low-P) groups of moral reasoning, by two (HEI, LEI) ego-involvement, by three (positive, non-involved, or negative)

Attitude, analysis of variance on reasoning of individuals in situational moral dilemmas was used. The analysis yielded one significant interaction, Attitude and P-group, $F(2,45)=3.35$, $P<.01$, and two significant main effects: Attitude $F(1,45)=5.41$, $P<.01$, and P-group, $F(1,45)=88.23$, $P<01$.

TABLE 1

HIGH AND LOW EGO-INVOLVEMENT MEANS AND STANDARD DEVIATIONS FOR ATTITUDE AND P-GROUP

		Positive	Non-Involved	Negative
High Ego-Involvement	High-P			
	$\bar{x}$	44.8	14.8	32.6
	S	12.5	6.3	12.27
	N=5			
	Low-P			
	$\bar{x}$	14.6	9.4	11.4
	S	8.26	9.67	5.57
	N=5			
Low Ego-Involvement	High-P			
	$\bar{x}$	35.2	30.0	39.0
	S	6.68	4.8	8.2
	N=	5	5	3
	Low-P			
	$\bar{x}$	10.6	10.8	7.5
	S	3.63	6.24	3.03
	N=	5	5	4

TABLE 2

ANALYSIS OF VARIANCE ON SITUATIONAL MORAL DILEMMAS
BY EGO INVOLVEMENT, ATTITUDE, AND P-GROUP

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Value	Significance of F
Main Effects					
Level of Ego-Involvement	.13	1	.13	.002	.967
Attitude	849.93	2	427.97	5.41	.008
P-Group	6937.42	1	6937.42	88.23	.00001
2-Way Interactions					
Level of Ego-Involvement Attitude	452.49	2	226.24	2.89	.067
Level of Ego-Involvement P-Group	77.17	1	77.17	.98	.327
Attitude P-Group	526.25	2	263.13	3.35	.044
3-Way Interaction					
Level of Ego-Involvement P-Group	205.11	2	102.56	1.30	.281
Error	3538.12	45	78.625		
Total	12570.59	56	224.48		

Attitude and P-Group

From the results of the three-way analysis of variance summarized in Table 2, the significant interaction of attitude and P-group also explains the main effects of attitude and P-group. A test of simple main effects (Kirk, 68) was conducted in order to explain the interaction effects. The results of this test are summarized in Table 3.

TABLE 3

SIMPLE MAIN EFFECTS OF ATTITUDE BY P-GROUP

Source of Variation	Sum of Squares	Degrees of Freedom	F Value
P-group at Positive Attitude	29833.8	1	379.440**
P-group at non-involved Attitude	974.8	1	12.460**
P-group at Negative Attitude	998.4	1	12.698**
Attitude at High P-Group	1617.067	2	10.283**
Attitude at Low P-Group	37.28	2	.237

Mean square error 78.625
Degrees of Freedom error 45
** P<.01

Attitude was significantly different at all three directions for P-group. High P-group was significantly different at attitudinal direction, but low P-group was not. Figure 1 is a graphic representation of the

interaction, with Table 4 indicating mean scores for P-groups by attitudinal direction.

Figure 1

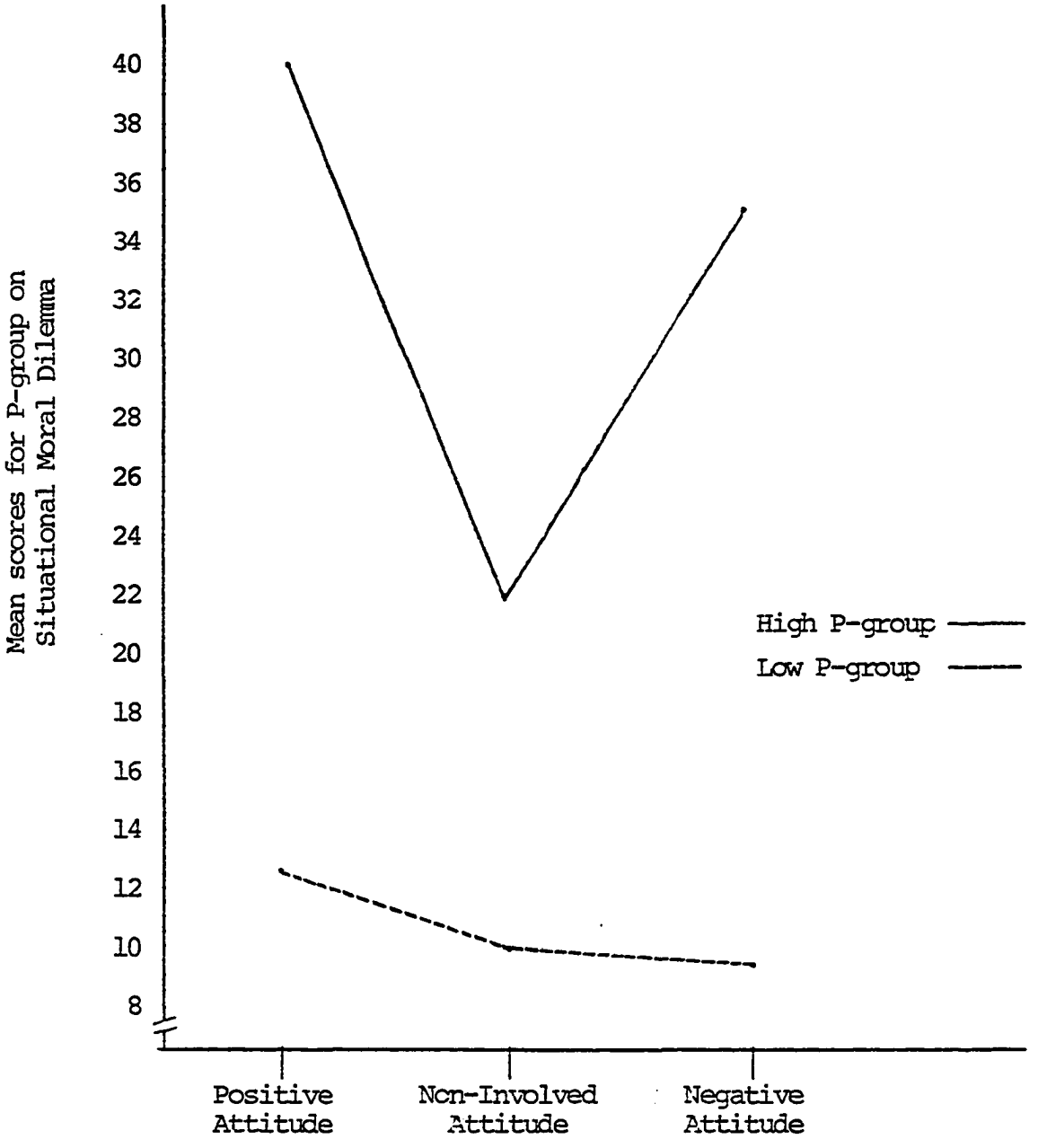

Figure 1

P-Group Scores on Situational Dilemma by Attitude

TABLE 4

A POSTERIORI SIMPLE MAIN EFFECTS COMPARISON
FOR ATTITUDE AT HIGH-P GROUP

Source of Variation	Sum of Squares	Degrees of Freedom	F Value
Positive, Non-Involved Attitude at High P-group	1548.8	1	19.698**
High P-group at Positive, Negative Attitude	111.11	1	1.413
High P-group at Non-Involved, Negative Attitude	705.6	1	8.914**

Mean squre error 78.625
Degrees of Freedom error 45
** P<.01

TABLE 5

MEAN SCORES FOR P-GROUPS BY ATTITUDE
ACROSS EGO-INVOLVEMENT

	Positive EI Direction	Non-Involved EI Direction	Negative EI Direction
High-P			
$\bar{x}$	40.0	22.4	35.0
N	10	10	8
Low-P			
$\bar{x}$	12.6	10.1	9.66
N	10	10	9

Positive EI Direction was significantly different for P-groups, $F(1,45)=397.44$, $P<.01$, as was non-involved attitude, $F(1,45)=12.46$, $P<.01$, and negative attitude, $F(1,45)=12.698$, $P<.01$. All directions of ego-involvement were significantly different for P-groups. However, only for high P-group were attitudes significantly different, $F(2,45)=10.283$, $P<.01$. Attitudes only differ significantly in the high P-group and not in the low P-group. In the high P-group positive attitude was significantly different from non-involved attitude, $F(1,45)=19.698$, $P<.01$, and non-involved attitude was significantly different from negative attitude, $F(1,45)=705.6$, $P<.01$. Positive attitude and negative attitude were not significantly different in the high P-group. In the high P-group where attitude was significant the difference was between positive attitude and non-involved attitude, and also between non-involved attitude and negative attitude. Among high moral reasoners, those with positive or negative attitudes toward ERA issues made higher level moral decisions than those who were non-involved. This supports the hypothesis that there will be a difference in the way subjects respond to situational moral dilemmas based on attitude.

Attitude and Ego-Involvement

The hypothesis predicting a difference in responses to situational moral dilemmas between ego-involvement and attitude was not supported. The interaction between ego-involvement and attitude was not significant, but warranted consideration (Table 2). While LEI position remained relatively constant across attitudes (Figure 2), HEI position changed across attitudes.

Figure 2

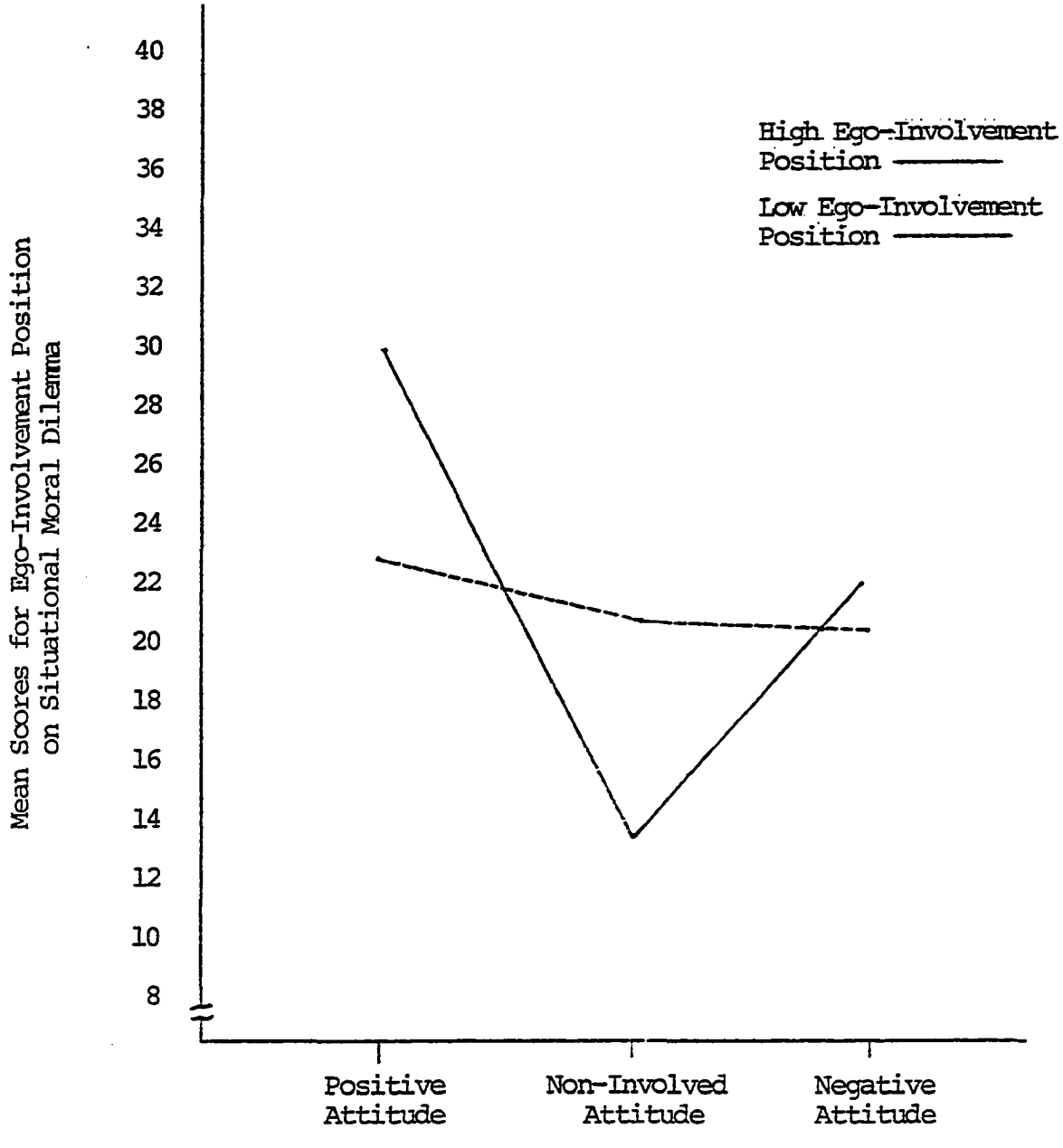

Figure 2

Ego-Involvement Scores on Situational Dilemma by Attitude

The lowest mean score occurred with HEI position and non-involved attitudinal direction. At this point the HEI position mean score was lower than the LEI position mean score, yet was higher at both positive and negative attitudes.

TABLE 6

MEAN SCORES FOR EGO-INVOLVMENT BY ATTITUDE ACROSS P-GROUP

	Positive	Non-Involved	Negative
High EI			
$\bar{x}$	29.7	13.8	22.0
N	10	10	10
Low EI			
$\bar{x}$	22.9	20.4	21.0
N	10	10	7

Discussion

This study was designed to explore the relationships between ego-involvement on an issue and moral judgements made about that issue. Previous theoretical research has emphasized the concept of stage consistancy across situations, yet empirical research has questioned this consistancy assumption particularly as it may be influenced by individual factors. For this study ego-involvement and attitude were identified as an individual factors with which to test the assumption of stage consistancy. The results of this study do not support the assumption of stage consistancy, but rather identify the individual

factor of attitude as influencing moral decision making concerning dilemmas which center about the issue of involvement.

The hypothesis that responses to situational moral dilemmas will differ based on ego-involvement was not supported. Individuals who were highly ego-involved in the ERA issue did not differ significantly from those who exhibited low ego-involvement in the ERA issue. This is possibly due to the inconsistency with which HEI level individuals made decisions across the various attitudinal positions (positive, non-involved and negative). The second hypothesis of differences in responses in situational moral decisions based on attitudes was supported. Individuals made different decisions based on attitudes.

The third hypothesis of pattern difference of responses to situational moral dilemmas between attitude at various ego-involvement levels was partially substantiated. The interaction of ego-involvement position by attitude was not significant. However, the test of simple Main Effects (Table 3), revealed that attitude was significantly different for the high P-group, but not for the low P-group. The differences in attitude were between positive attitude and non-involved attitude, and between non-involved attitude and negative attitude. Positive and negative attitudes were not significantly different. While ego-involvement did not prove significantly different, attitudes did. It is, for this research, the attitude of the individual rather than the level of ego-involvement which proved to be significant. The rather marked disparity in attitude across P-group (Figure 1) and level of ego-involvement (Figure 2) may account

for this. Future research may examine ego-involvement holding attitude constant in order to get a more clear picture of the influence of EI position.

The significant difference between P-groups can be explained in that the P-groups were originally identified and classified by P-scores on Rest's DIT. Since pilot research indicated a relationship between the DIT and ERA dilemmas, it is logical to assume that those in the high P-group would make decisions at a higher level than those in the low P-group. This supports the consistency assumption across P-groups.

Another area for future research might be that of attitude and moral decisions. It is interesting to note that there is an inconsistent drop in moral reasoning with HEI and non-involved attitude. The mean score for non-involved attitude is lower for HEI individuals than LEI individuals and higher for positive and negative attitudes though only slightly so for the latter (Figure 2). It would seem that there is an actual drop in moral reasoning when the individual is highly ego involved with being non-involved. This may be explained by Turiel's (1973, 74) concept of "progressive equilibration". There is a disequilibrium which results when an individual is exposed to reasoning at a higher stage producing a re-examination of a current mode of thought with a resulting more accomodating mode of thought concerning a particular issue. If an individual is highly involved in an issue either positively or negatively, there may be a tendency to examine new thoughts on the issue thus producing a disequilibrium. However, an individual highly involved with being non-involved in an issue may selectively refuse to consider new thoughts on the issue, thereby eliminating the possibility of

disequilibrium and resulting in a regression in moral decision making as in this study.

While moral decision making can be identified as developmental in nature, this research supports the contention that there is the individual factor of situational relevance which influences moral decisions about that particular situation. Future research may yield other individual factors influencing moral decisions and clarify the influence of situational relevance in moral decision making. This will help to illuminate moral decision making, resulting in greater comprehension of the complex skills involved in making moral decisions.

Summary

The current study investigates effects of individual factors, ego-involvement and attitude, on moral decisions made concerning situations centered about that involvement. Two hundred-thirteen students were administered the DIT, the ERA Ego-Involvement instrument, and the ERA Moral Dilemmas (Appendix C). Students were classified according to level of moral development level (high-P or low-P), and both Ego-Involvement position (high ego-involvement or low ego-involvement) and direction (positive, non-involved, or negative). Five students were selected randomly from the subject pool for each of the twelve classification groups, with the exception of two groups not containing five subjects in the subject pool, thus necessitating an analysis of variance on unequal cell sizes. The sample utilized for analysis contained fifty-seven subjects. Descriptive information on the total sample and experimental sample appears

in Appendix D. An analysis of variance was conducted on ERA Moral Dilemma scores.

Attitudinal direction proved to be a significant factor influencing situational moral decisions made by students operating in the high moral development group, with positive and negative direction of ego-involvement producing significantly different reasoning scores from non-involvement reasoning scores. Level of ego-involvement did not prove to be a signficant factor. Moral development group was also a signficant factor in influencing situational moral decisions. This is a logical outcome, since groups were initially classified according to level of moral development.

Within the high moral development group, students who were highly involved in being supportive or critical of the ERA issue made moral decisions concerning that issue at a higher level than students who were highly involved with a position of non-involvement.

This research found the individual factor of attitude on an issue to effect moral decisions made concerning that issue. This does not support the theoretical assumption of cross-situational consistancy of moral reasoning. Individuals classified as high or low in moral reasoning maintained those levels in situational moral decisions. This provides support for consistancy assumption across levels of moral reasoning.

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APPENDIX A

Prospectus

CONSISTANCY OF MORAL JUDGEMENTS ON EGO-INVOLVING MORAL DILEMMAS

The conceptualization of moral development as a function of progressive stages has its roots in the work of Jean Piaget (1932). Piaget's conceptual framework identified three states, each requiring a more progressively sophisticated cognitive structure than prior states in order to internalize the stage reasoning and consequently, exhibit the stage behaviors. The first of Piaget's moral stages dealt with ritual behaviors exhibited primarily through motor skills. The second of these stages exemplified a static rule dominated conceptualization of morality. The third and final of Piaget's stages represented reasoning and consequently exhibited behaviors which reflected a cognitive structure dealing with and utilizing socially influenced phenomena. These stages, as do the cognitive stages of development, illustrate a more progressively sophisticated cognitive ability with which to interact with the environment.

The stage progression concept is clearly exhibited in the moral development work of Lawrence Kohlberg (1958, 63, 69, 75). Kohlberg expanded the three stage framework of Piaget through further refinement of those stages, and also identifying dual substages for each of the three

originals. Kohlberg's theoretical framework as identified by Kohlberg and Kramer (1969) may be summarized as follows:

I. Preconventional Level

At this level the child is responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels in terms of either the physical or the hedonistic consequences of action (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels. The level is divided into the following stages:

Stage 1: The punishment and obedience orientation. The physical consequences of action determine its goodness or badness regardless of the human meaning or value of these consequences. Avoidance of punishment and the unquestioning deference to power are valued in their own right, not in terms of respect for an underlying moral order supported by punishment and authority (the latter being Stage 4).

Stage 2: The instrumental relativist orientation. Right action consists of that which instrumentally satisfied one's own needs and occasionally the needs of others. Human relations are viewed in terms like those of the market place. Elements of fairness, or reciprocity and equal sharing are present, but they are always interpreted in a physical pragmatic way. Reciprocity is a matter of 'you scratch my back and I'll scratch yours,' not of loyalty, gratitude or justice.

II. Conventional Level

At this level, maintaining the expectations of the individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious consequences. The attitude is not only one of conformity to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting, and justifying the order and of identifying with the persons or group involved in it. At this level, there are the following two stages:

Stage 3: The interpersonal concordance of 'good boy-nice girl' orientation. Good behavior is that which pleases or helps others and is approved by them. There is much conformity to stereotypical images of what is majority or 'natural' behavior. Behavior is frequently judged by intention — 'he means well' becomes important for the first time. One earns approval by being 'nice'.

Stage 4: The 'law and order' orientation. There is orientation toward authority, fixed rules, and the maintenance of the social order. Right behavior consists of doing one's duty, showing respect for authority and maintaining the given social order for its own sake.

III. Post-Conventional, Autonomous, or Principal Level

At this level, there is a clear effort to define moral values and principles which have validity and application apart from the authority of the groups or persons holding these principles and apart from the individual's own identification with these groups. This level again has two stages:

Stage 5: The social-contract legalistic orientation generally with utilitarian overtones. Right action tends to be defined in terms of general individual rights and in terms of standards which have been critically examined and agreed upon by the whole society. There is a clear awareness of the relativism of personal values and opinions and a corresponding emphasis upon procedural rules for reaching consensus. Aside from what is constitutionally and democratically agreed upon, the right is a matter of personal 'values' and 'opinion'. The result is an emphasis upon the possibility of changing law in terms of rational considerations of social utility (rather than freezing it in terms of Stage 4 'law and order'). Outside the legal realm, free agreement, and contract is the binding element of obligation. This is the 'official' morality of the American government and the Constitution.

Stage 6: The universal ethical principle orientation. Right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency. These principles are abstract and ethical (the Golden Rule, the categorical imperative) they are not concrete moral rules like the Ten Commandments. At heart, these are universal principles of justice of the reciprocity and equality of the human rights and of respect for the dignity of human beings as individual persons.

In keeping with Piagetian developmental theory, Kohlberg also identifies these stages as progressive or developmental in nature. Theoretically, each of these stages is more complex than the one prior. An individual progresses through the stages in a hierarchial structure. Rest (1973) found that those who exhibited comprehension of statements based on one of the moral stages could also exhibit comprehension of statements with a basis in prior moral stages supporting this hierarchial structuring of moral reasoning.

The relationship between cognitive and moral developmental stages has also been supported by other research (Brooks-Walsh and Sullivan, 1973, Jantz, 1973, Tomlinson-Keasey and Keasey, 1974, and Weinrich, 1975). The facilitating and constraining effects of cognitive development on moral development were explored by Khun, Langer, Kohlberg, and Haan (1971). Mays (1975) determined that cognitive development parallels or preceeds moral development, while Leming (1975) found age and empathy to be the primary prediction variables for stage of moral reasoning and that levels of moral development were not shown to advance significantly over levels of cognitive development. The influence of cognitive levels on moral reasoning has, therefore, been established in the basic hierarchial stage structure of development.

Moral Development Stages

The process by which an individual progresses from one stage to another was investigated by Turiel (1966). Turiel examined the change process by which an individual exhibits moral reasoning at a higher stage than previously exhibited. He found that an individual is more likely to exhibit change when exposed to moral reasoning at one stage above (+1) a previously exhibited reasoning stage. Keasey (1973) conducted research which tended to support Turiel's findings on moral development change process. Keasey found change more likely to occur when an individual was exposed to +1 reasoning than same stage reasoning or no reasoning presented at all.

Turiel (1973) determined change from one stage to the next to be a function of the individual's interaction with the environment. This

concept of change was expanded (Turiel, 1974) to include a more comprehensive explanation of the change from one stage to another. This change being a process of self regulated "progressive equilibration" whereby the developmental process is continually directed toward increasing equilibrium. Each of the hierarchial stages is seen to be progressively more equilibriated. Thus the environmental stimuli of reasoning at one stage above the individual's level of reasoning produces within the individual a state of conflict or disequilibrium which is resolved when the current mode of thinking is examined and a new expanded mode developed. This is the means by which moral development progresses through stages.

The points at which this moral developmental process takes place are not quite so clear. The highest stage of cognitive development identified by Piaget, formal operations, he reports as appearing in the era of early adolescence, ages twelve to fifteen. While the onset of formal thinking occurs at this adolescent period, the continuing refinement of formal thinking may take place in early adulthood (Piaget, 1973). Since moral development to some extent parallels cognitive development, it is logical to assume the moral development process also occurs on into adulthood. While Kohlberg and Kramer (1969) reported that there was no new structural moral stage occuring in adulthood, a reexamination of this position (Kohlberg, 1973) resulted in a revision of this earlier position. Kohlberg identified Stage five and especially Stage six thinking as adult development not reached until the late twenties or later.

Kohlberg (1973) suggested that the nature of experiences leading to adult development differ from those involved in childhood and

adolescent movement through developmental stages. "Development of moral thought in childhood is an increasingly adequate comprehension of existing social norms and social ideas. Accordingly it develops through the usual experiences of social symbolic interaction and role taking. In contrast construction of principles seems to require experiences of personal moral choice and responsibility usually supervening upon a questioning period of 'moratorium'" (Kohlberg, 1973, p. 180).

Though moral developmental stages are considered to be progressive and sequential Kohlberg and Kramer (1969) presented research which was not consistent with the sequentiality of reasoning. In this study there was a regression phenomenon in which students predominatly at Stage four during high school, exhibited Stage two reasoning after entering college, and Stage five reasoning in their early twenties. This inconsistency in the sequentiality of the developmental stages was explained by Turiel (1974) as movement toward a more advanced, yet not fully comprehended higher stage; Kohlberg (1973) identified this phenomenon as a structural retrogression, but a functional advance. In order to explain the findings on retrogression and return to the social contract, Kohlberg utilized "Erikson's concepts of moratorium, identity crisis, and renewed commitment" (p. 190). It was further suggested that "after an individual had formed the capacity for morally principled thought, he still had to commit himself to do so. This commitment often was part of the resolution of an identity crisis or moratorium in which the individual displayed retrogression in moral thought" (p. 190). It is with the resolution of the stage of identity crisis that an individual is capable of principled or post conventional moral thought.

Kohlberg postulates the possibility of a seventh stage of moral development. The speculation is a hypothetical one related to earlier efforts to identify religious states reflected in both moral development stages and Erikson's ego states. This seventh stage is defined as one in which essence "is the sense of being a part of the whole of life and the adoption of a cosmic as opposed to a universal humanistic (Stage 6) perspective." (Kohlberg, 1973, p. 203) The seventh stage is a philosophical one reflected in the lives of those who lived and died for ethical principles.

From the preceeding theory and research it would seem that moral development progresses through identifiable stages (excluding the hypothetical seventh stage) which are sequential and hierarchial in nature. Progression occurs through exposure to reasoning at the next stage of development producing a state of disequilibrium which is resolved through the adoption of reasoning at the next higher stage of development. In light of recent research in moral development (Kohlberg and Kramer, 1969, Kohlberg, 1973, and Turiel, 1974), it would seem that there is considerable discord experienced in the transition from conventional to post conventional reasoning. It is here that it becomes evident that there are individual factors at work which are influencing moral decisions within stages.

Nature, Hierarchy and Consistancy of Moral Stages

Kohlberg (1976) indicated that the older form of the stage scoring system did not take into account content of moral thought as

distinct from structure of moral thought. Content of moral thought was clarified as the decision made and concepts used to justify the choice. The structure of moral thought was identified as the way the concepts had been used for choice justification. It is with this research that Kohlberg specifically identifies the complex transition period between conventional and post conventional reasoning of previous research (Turiel, 1973, Kohlberg and Kramer, 1969, and Kohlberg, 1973) as an identifiable stage known as "transitional." It is interesting to note that recent research developing an objective instrument for determining levels of cognitive development (Renner, 1977) also quantitatively identified a transitional stage between concrete and formal thought.

Going beyond Kohlberg's developmental theory, Rest (1975) suggested that there is an interrelationship between structural or stage factors, task factors, and individual subject performance factors which must all be considered to account for moral decisions. It is these factors according to Rest, which accounts for the inability to identify an individual as consistently functioning at any given stage. Rest, Cooper, Masanz, and Anderson, (1974) emphasized the necessity for considering the percentage of time that an individual was operating at any given level rather than stage typing at that level. Rest (1975) pointed out that since individuals do not consistently operate at a given stage, his Defining Issues Test (DIT) yields a score which is indicative of the percentage of time that an individual is making moral decisions using principled reasoing. He feels that there are other factors influencing moral reasoning and it is with the examination of future research data that Rest feels a clarification of individual factors will evolve which must be considered in the study of moral decision making.

Leming (1974) questions Kohlberg's theoretical assumptions of consistency across various forms of moral reasoning. Specifically Leming speculated that raising an individual's level of moral reasoning in one area may not necessarily cause a general overall elevation in moral reasoning. The problem of stage stability must consider the distinction between the judgement mode and deliberation mode of moral reasoning. Baier (1965) identifies the judgement mode as a type of rational for determining the appropriateness of a behavior after it has occurred and the deliberation mode as one of planning the most desirable behavior before any action has taken place. A secondary consideration suggested by Leming is that of classical and practical dilemmas. A classical dilemma is a standard one as used by Kohlberg occurring outside the life space of an individual, while a practical one is that which is immediate to the individual involved in the dilemma. Leming finds the Kohlberg rational for moral assessment to be in the realm of a classical judgement mode rather than the practical deliberation mode.

Other researchers have identified further problems of stage consistency and individual factors which influence moral decisions. Bressler (1976) specified that an individual's knowledge of principles of moral justice does not offer directives for dealing with specific moral conflicts. McNamee (1975) found that people at almost all levels of moral development do not help someone in need although they feel this person should be helped. Though previous research (Kohlberg, 1973, and Turiel, 1973) indicates the six stages of moral reasoning to be a cross cultural universal, Simpson (1974) found cultural bias to be a factor evident in stage identification. Peters (1971) criticized the

lack of considering motivation as necessary for transferring moral concepts into behavior.

From the previous research it would seem that the theoretical assumptions underlying stage consistency may be questionable due to alternative explanatory concepts such as "moral thought structure," "individual subject performance," and "task factors" which may influence moral decisions, thus affecting stage consistency (Fishkin, Keiston, and MacKinnon, 1973, and Hudgins and Prentice, 1973). Moral decisions are influenced by factors outside the realm identified as developmental. These factors are of an individual and situational nature. What are factors which may influence "moral thought structure," "individual subject performance," "task factors" and "practical deliberation"? Haan (1975) found that a sample of college students used a different level of reasoning — forty-six percent higher and twenty percent lower — in a civil disobedience situation than they did in hypothetical dilemmas. Scharf (1971, 1973) found that prison inmates exhibited more primitive moral reasoning in dealing with prison related dilemmas than in the standard moral dilemmas. Leming (1974) suggested that the effectiveness of moral education programs would be determined by their ability to focus on naturally occurring situations within the life-space of the students. Keasey (1973) found moral judgement to be influenced by consistency with individual belief systems. A dilemma which is situationally relevant to an individual may affect moral reasoning concerning that particular dilemma. Individual involvement in an issue may be a factor influencing decisions concerning that issue and, therefore, affecting the concept of stage consistency.

Ego-Involvement and Judgements

A conceptualization for explaining the intensity of individual involvement in an attitudinal issue was referred to as ego-involvement by Sherif and Cantril (1947). A person ego-involved in a specific attitudinal issue may be expected to respond to information concerning that issue quite differently than one who is not ego-involved. The very fact that a person is ego-involved in an issue indicates that judgements concerning that issue are more consistent than one who is not ego-involved (Klein and Schoenfeld, 1941, Holt, 1945, Huntley, 1940). In a study by Cartwright (1941), subjects with extreme political positions had a smaller range of acceptance than those who were not extreme. Johnson (1955) found subjects with extreme positions to make more negative judgements with greater confidence than those of a more moderate position. "The person who zealously upholds a position tends to be quite particular about accepting other positions and is likely to see the rest of the world as opposed to his stand — 'those who are not for us are against us'" (Sherif and Hovland, 1961, p. 130). It is the influence of ego-involvement which may provide a theoretical framework for identifying an influence which may affect stage consistency in situations requiring judgements of the moral dilemmas of moral development theory.

The concept of ego-involvement is an operational one (Sherif, Sherif, and Nebergall, 1965). One's ego-involvement on a given issue is defined by using one of two instruments designed to determine such. The scale used for this research is the "method of ordered alternatives." The scale adopts two extreme positions and a range of statements from one extreme to the other. The scale usually has a range of nine statements spanning these

extremes. The subject is asked to identify the single statement found most acceptable (MA), other acceptable statements (A), the single statement found most objectionable (MO), and all other objectionable statements (O). The latitude of acceptance (LA) is the most acceptable statement and other acceptable statements. The latitude of rejection (LR) is the most objectionable statement and other objectionable statements. The latitude of non-commitment (LNC) is comprised of those statements not identified as either acceptable or objectionable. The degree of ego-involvement is the relationship between LA and LR. An individual, who is highly ego-involved in an issue, will have a relatively small LA and a large LR. The individual who is not ego-involved in the issue should have a wide LNC and LA and a smaller LR. Thus, an individual can be highly ego-involved in favor of or against an issue or he can be neutral. These positions can be objectively determined and defined by the method of ordered alternatives.

Research in moral development has questioned the theoretical assumptions of stage consistancy and suggested that the consistency assumption may be influenced by individual factors. Ego-involvement may be an effective model for testing the consistency assumption in the presence of ego-involvement which is high or low in favor of, or non-involved in a situationally specific issue requiring judgement in a moral dilemma.

In order to test the assumption of stage consistency in the presence of ego-involvement, it becomes necessary to determine some situational issue in which ego-involvement seems likely. Public issues which are the subject of legislative action and public influence provide an arena for such situationally specific issues (Hovland, Harvey, and Sherif, 1957).

An issue currently situationally relevant to a state which has not yet ratified the Equal Rights Amendment are issues centered about that ratification. Attempts at ratification in the state legislatures have resulted in demonstrations and outcries from individuals and groups reflecting a diversified spectrum of involvements in the issue. This may, then, be an issue which may evoke ego-involvement in individuals.

Mlott, Bostick, and Lura (1977) conducted research on female freshman in which the personality factors of dogmatism, as measured by the Rokeach Dogmatism Scale, and locus of control, as measured by the Rotter I-E Scale, were examined for differences among those supporting, not supporting, and neutral on the Equal Rights Amendment. They reported no difference in groups. However, a major research criticism may be that the method for identifying ERA support was not specified. Because the total sample was utilized, the groups may not have been distinct enough. Identifying groups by the degree of ego-involvement on a measure such as ordered alternatives may have produced a greater distinction in groups and, therefore, have affected the dependent measures. With this consideration, the following research is proposed.

The purpose of this research will be to explore the possible relationships between ego-involvement on an issue and moral judgements made about that issue. High ego-involvement on an issue related to the Equal Rights Amendment may influence the moral decisions that an individual makes relevant to that particular issue as compared to the moral decisions made on the standard moral dilemmas.

Research Problem

Is the stage of moral reasoning exhibited consistant across standard moral dilemmas and situationally specific dilemmas pertaining

to ERA when there is high or low ego involvement in favor of, non-involvement, or against the issue?

Research Hypotheses

1. There will be a difference in the way subjects respond to situational moral dilemmas based on their position of ego-involvement.

2. There will be a difference in the way subjects respond to situational moral dilemmas based on their attitudinal direction.

3. There will be different patterns on subjects' responses to situational moral dilemmas, between ego-involvement position at the various attitudinal directions.

Method

Two hundred forty-eight subjects will be administered the Defining Issues Test short form (DIT), the ERA Ego-Involvement instrument, and the ERA Moral Dilemmas. Subjects will be classified according to P scores on the DIT (Rest, 1974) with the upper fifty percent of the sample comprising the upper principled reasoning group (upper P) and the lower fifty percent comprising the lower principled reasoning group (lower P). Two positions of ego-involvement will be determined for each P group on the ERA Ego-Involvement instrument, high ego-involvement (HEI) with positive, non-involved, or negative attitudes on the issue, and low ego-involvement (LEI) with positive, non-involved, or negative attitudes on the issue. Subjects will be classified as highly ego-involved with a latitude of rejection of three or less on the ego-involvement instrument. Subjects will be classified as taking a positive direction on the ego-involvement instrument if the most agreeable item (MA) occurs in the positive section of

the instrument, items one through three. Subjects will be classified as taking a non-involved direction if the most agreeable item (MA) occurs in the non-involvement section of the instrument, items four through six. Subjects will be classified as taking a negative direction if the most agreeable item (MA) occurs in the negative section of the instrument, items seven through nine. Subjects will, then, be classified according to P group (upper P or lower P), position of ego-involvement (HEI or LEI), and attitude on the ego-involvement issue (positive, non-involved, or negative). Sixty subjects will then be selected randomly from the resulting twelve classification groups, five from each group. The P scores on the situational moral dilemmas will then be analyzed for these sixty subjects to determine differences in situational moral reasoning based on P group, ego involvement, and attitude.

Two hundred forty-eight undergraduate students will be selected by voluntary participation from five education classes and one known group class, sociology of women. Sample size calculations indicated a sample size of sixty subjects to be appropriate to detect main effect differences for the size effect of one half of one standard deviation at the .95 level of power (Kirk, 1968), with alpha at the .05 level. The initially large sample was obtained in order to insure an adequate number for each classification group.

Test Instruments

1. The short version of the Defining Issues Test (DIT, Appendix B) will be used to assess moral development of subjects. It will serve as a classification instrument and a reference to determine changes in moral reasoning in the situational dilemmas. The short version of the DIT has the same research considerations as the long version. It is not

suited to those whose primary language is not English (Rest, 1974), and it has a reading level of 11 to 13 years (McGeorge, 1973). The full model has a test retest reliability of .81 (Rest et al., 1974). The short version has a correlation of .93 with the full model (Rest et al., 1974). The Spearman-Brown Prophecy formula estimating short form reliability from the long form (Mehrens, and Lehmann, 1978) gives a minimum reliability of .87. The full model has a correlation with the Kohlberg interviews of .68 (Rest et al., 1974). Although a stage score can be calculated from the DIT, the emphasis placed by Rest (1974) for scoring is upon the P score which is the relative importance a subject gives to principled moral considerations in making moral judgements. The P score will be used in this research. The short version of the DIT yields a P score comparable to the full model, making it a practical and suitable measure of moral development when research constraints make the utilization of the full model DIT impractical.

2. The ego-involvement instrument following the Sherif method of ordered alternatives will be used to determine ego-involvement (Appendix C). The attitude questionnaire will be comprised of nine statements which span a range between two extreme positions on the basic contention of the ERA issue, equal treatment under the law for males and females. Attitudinal scaling according to the method of ordered alternatives yields several measures. The latitude of acceptance (LA) is comprised of the most acceptable position (MA) plus all other acceptable (A) items indicated by the subject. The latitude of rejection (LR) is comprised of the most objectionable position (MO) plus all other objectionable items indicated by the subject. The latitude of non-commitment is comprised

of all unmarked items. For the purpose of this study LR will be used to indicate high or low ego-involvement and the MA item will be used to indicate direction, positive, non-involved, or negative. In a sample utilized for this research the LR as measured by the Ego-Involvement Instrument had a test retest reliability of .39, while the MA item had a test retest reliability of .56. This measurement technique provides a means of determining a subject's position on a particular issue, and also provides some index as to the degree of involvement concerning that position. This provides the classification criteria of direction (positive, non-involved, or negative) and degree of involvement (HEI or LEI) necessary for the purposes of this research.

3. The ERA Moral Dilemmas (Appendix C) devised in the pilot research (Appendix B) were patterned after the DIT. The format and scoring procedure are the same. The ERA Moral Dilemmas have yielded scores comparable to the DIT in a small sample study. Among twenty-four females in the pilot study the ERA Moral Dilemma scores have a correlation of =.55 with the DIT scores. For this sample size the correlation is significant at the .05 level. The pilot study produced test-retest reliability for the ERA Moral Dilemmas of .69. This is also significant at the .05 level. The DIT was used as a model because it has an established relationship with Kohlberg's more complex method or determining level of moral development by stage typing (Rest, et al., 1974), and because it has become a standard tool in moral development research. A significant relationship between the DIT and the ERA Moral Dilemmas contributes to an assumption of concurrent validity for the ERA Moral Dilemmas. It is, therefore, reasonable to use the ERA Moral Dilemmas along with the DIT.

Analysis

A two (high P, low P), levels of moral reasoning, by two (HEI, LEI) degrees of ego-involvement, by three (positive, non-involved, or negative), attitudinal position, analysis of variance on moral reasoning of individuals in situational moral dilemmas will be used. Where appropriate, Post Hoc tests of simple main effects for significant interactions and main effects for significant main effects will be utilized in order to analyze data resulting from the analysis of variance for interpretation.

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APPENDIX B

Pilot Study

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Pilot Study

In order to determine the efficiency of the instrumentation and general trend information, a pilot study was conducted. At this stage of the research, a second situational moral dilemma was introduced, that of nuclear power. The nuclear power issue is also one situationally salient to those in the State of Oklahoma with the construction of a nuclear reactor in the city of Inola, a topic of controversy and dissention. The problem statement and hypotheses for testing the nuclear dilemma remains essentially the same. The nuclear issue was introduced in order to check the hypotheses under two different situational dilemmas.

Thirty-four students enrolled in an undergraduate education class were administered the short version of Rest's Defining Issues Test, two Ego-Involvement issues, one on ERA and one on nuclear power, following Sherif's method of ordered alternatives, and two sets of situationally relevant moral dilemmas, one concerning ERA issues and one concerning nuclear power issues. The short version of the DIT is comprised of three stories rather than the six of the full model. The short version, Heinz, Prisoner and Newspaper stories yields a P score, which correlates .93 with the P score based on the full model (Rest et al., 1974). The P score is the percentage of time that an individual is using moral reasoning at the post conventional stage. The short version was selected in order to shorten the total instrumentation to be administered.

The two situationally relevant issues of ERA and nuclear power each contained nine statements ranging from a position of support to a position of rejection. Ego involvement according to Sherif (1961) is

constituted by the range of the latitude of rejection (LR) as compared to the latitude of acceptance (LA) and the latitude of noncommitment (LNC). The larger the LR in comparison to LA and LNC, the greater is the degree of ego-involvement. In addition to the ego involvement statements, behavioral indexes to issue involvement were also included. These were brief statements requesting "yes" or "no" answers to specific behaviors relating to a position on the issue. There was also an open ended statement where the subject could indicate activities different from those in the behavioral index.

There were three stories developed for each of the situational issues of ERA and nuclear power keeping the number for the stories of each issue the same as the short version of the DIT. The items for selection according to importance were patterned after the DIT. The situational moral dilemmas were, therefore, scored in the same way as the DIT. yielding a P score for each issue.

The information obtained in the pilot study was as follows:

1. Scores for subjects on the DIT.
2. LA, LR, LNC, and position on ERA ego involvement instrument.
3. LA, LR, LNC, and position on nuclear power ego involvement instrument.
4. Behavioral index to ERA activities.
5. Behavioral index to nuclear power activities.
6. Scores for subjects on ERA dilemmas.
7. Scores for subjects on nuclear power dilemmas.
8. Sex of subject.

The instruments and instructions used for administration appear in Appendix C.

Results

The results were interpreted descriptively. Two of the subjects, one male and one female, did not complete the instrumentation for the moral dilemmas, so there are thirty-two in the sample for all three moral dilemmas. The total sample of thirty-four was utilized in information presented on the two ego-involvement scales.

The raw mean scores for both the ERA dilemmas and the nuclear dilemmas show a slight increase over the raw mean scores for the DIT.

TABLE 1

RAW SCORE MEANS* AND STANDARD DEVIATIONS FOR MALES AND FEMALES ON DIT DILEMMAS, ERA DILEMMAS, AND NUCLEAR DILEMMAS

		DIT Dilemmas	ERA Dilemmas	Nuclear Dilemmas
Female	$\bar{x}$	13.1	14.25	15.5
	S	5.03	5.62	5.48
Male	$\bar{x}$	10.6	13.3	19.0
	S	4.59	5.72	2.78

*Range on each Dilemma was 0 to 30.

among twenty-five females. Though the male sample is extremely small, seven, there is also an increase in raw mean scores for both the ERA dilemmas and the nuclear dilemmas over the raw mean scores for the DIT. The increase in males is more marked than in females.

The issue of ego involvement is the one which produced the most difficulty. The subjects in the sample did not exhibit responses on the ego involvement issues which made it possible to classify a substantial group as ego involved in either issue.

Figure 1

Latitude of Acceptance for Females

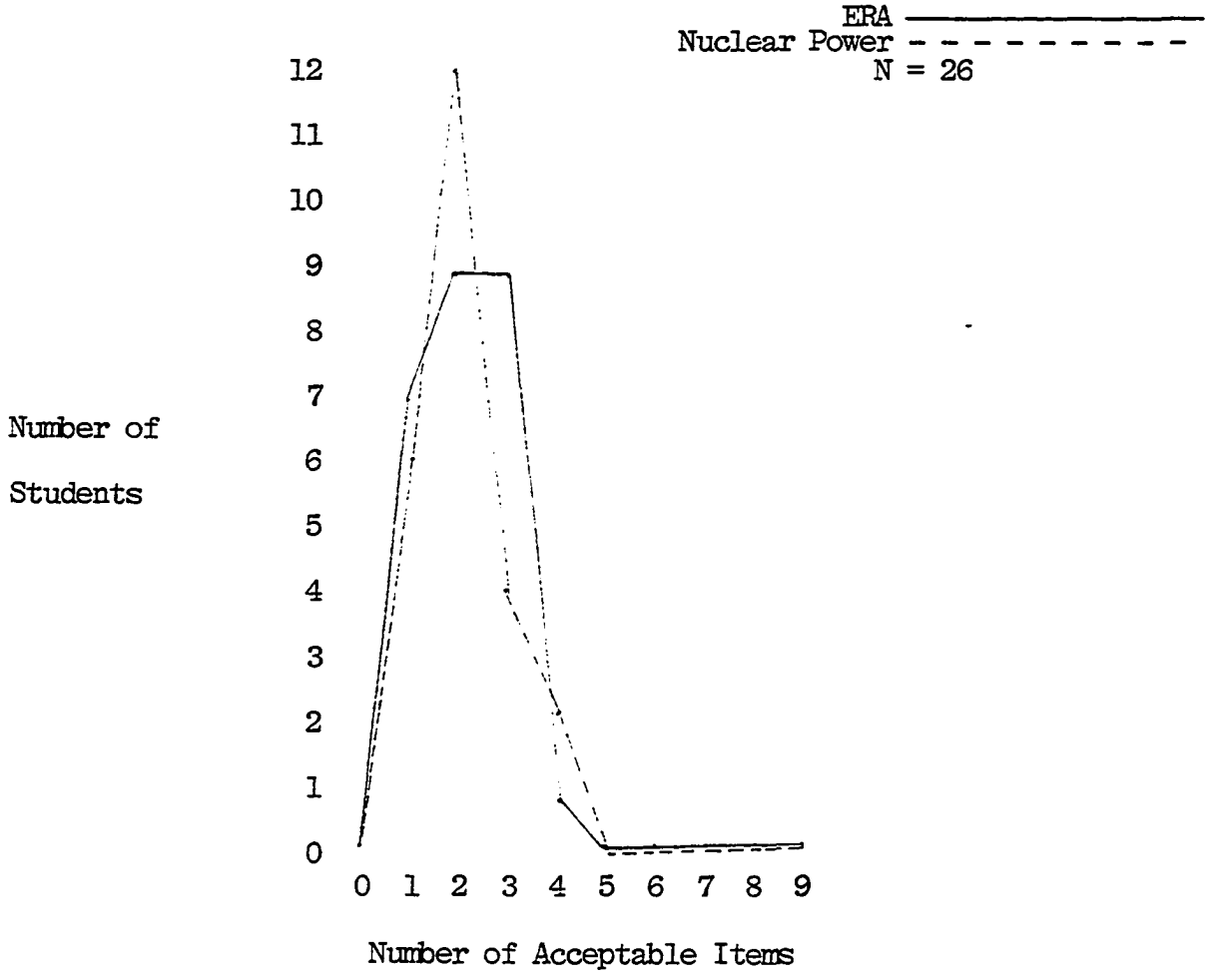


Figure 2

Latitude of Rejection for Females

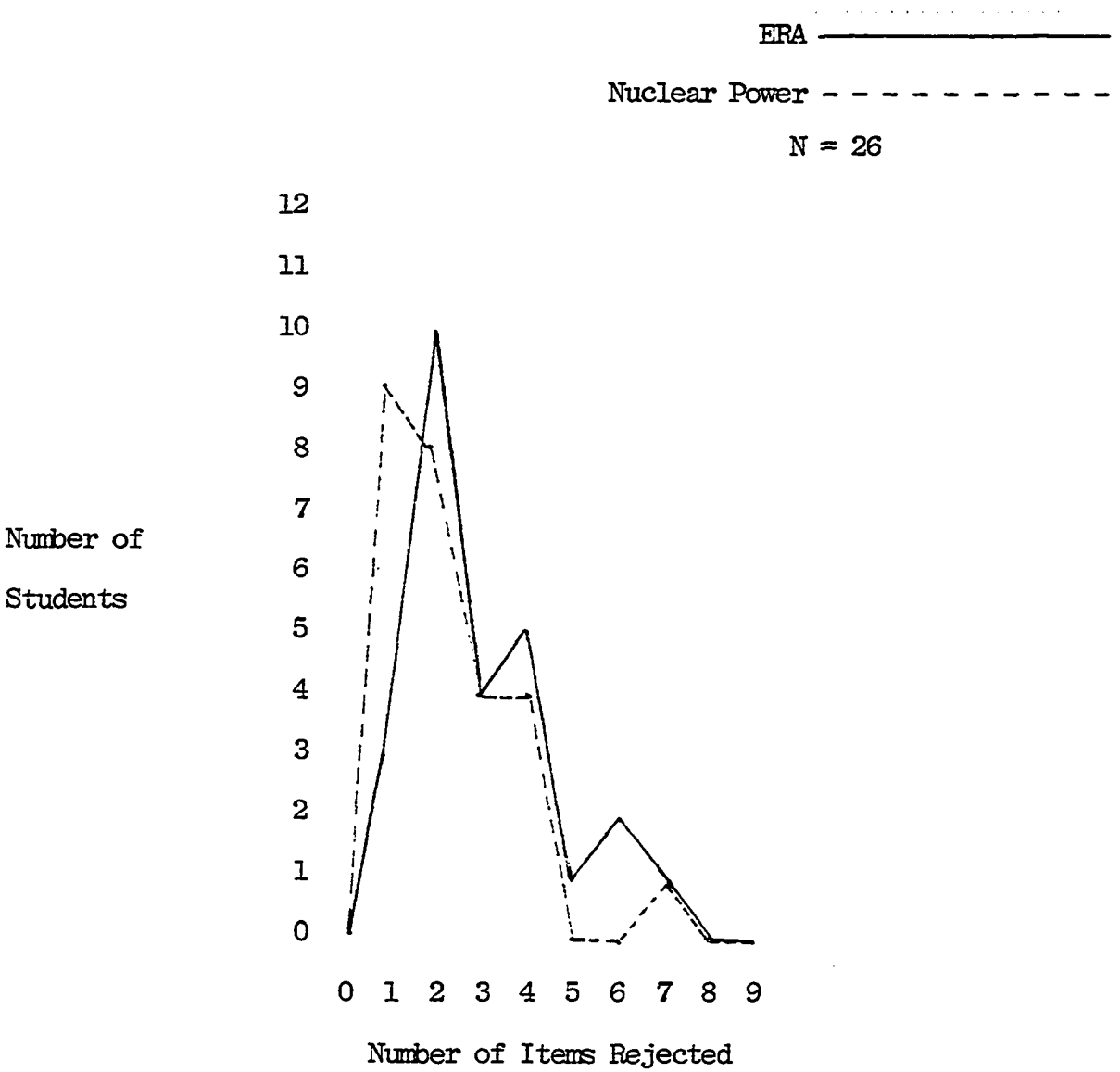
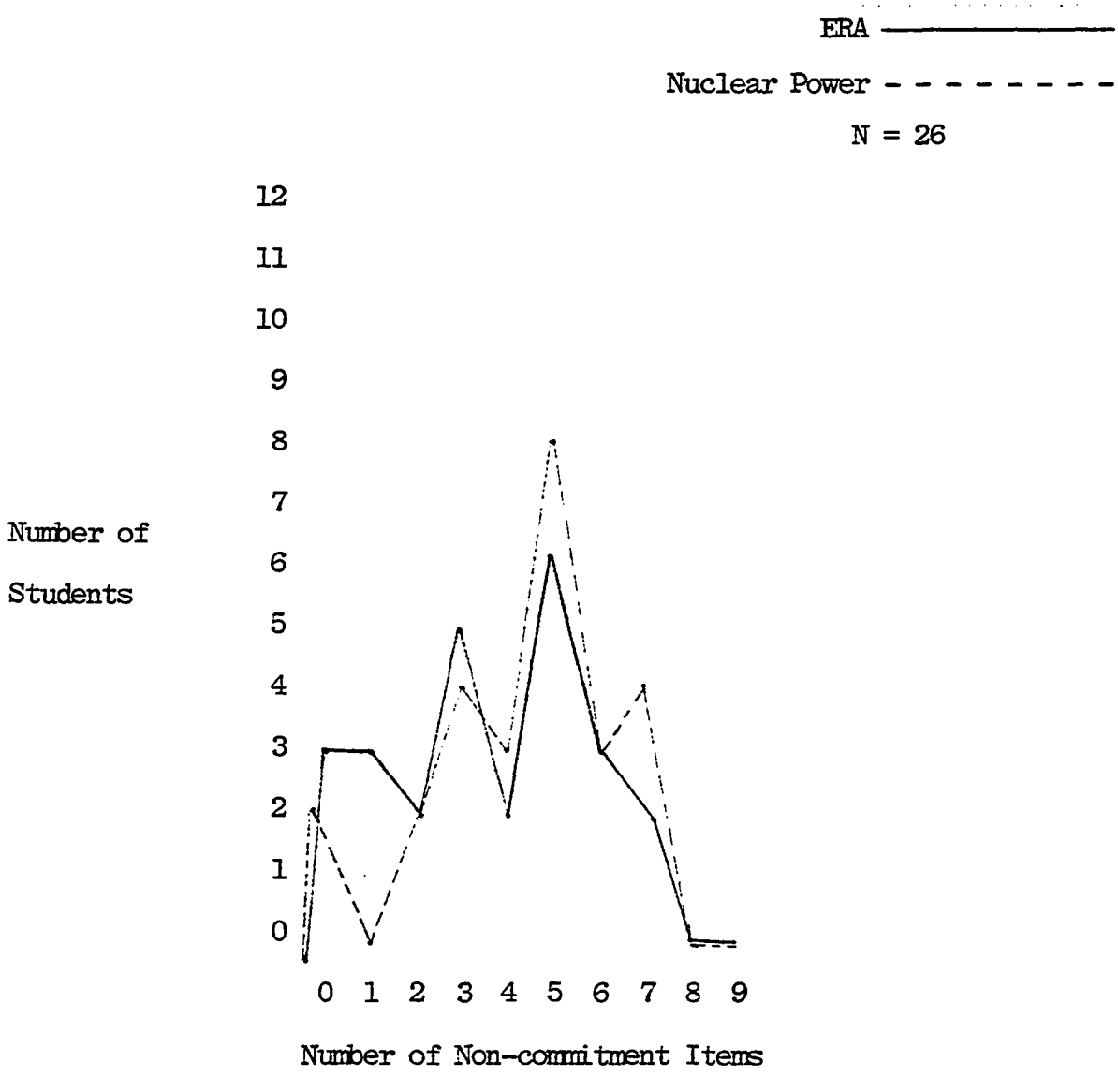


Figure 3

Latitude of Non-commitment for Females



The LA, LR, and LNC are similar for both issues with eight females showing a LR of four or greater on the ERA issue and six showing a LR of four or greater on nuclear issue. There is also similarity for males though the number indicating involvement is smaller.

Figure 4

Latitude of Acceptance for Males

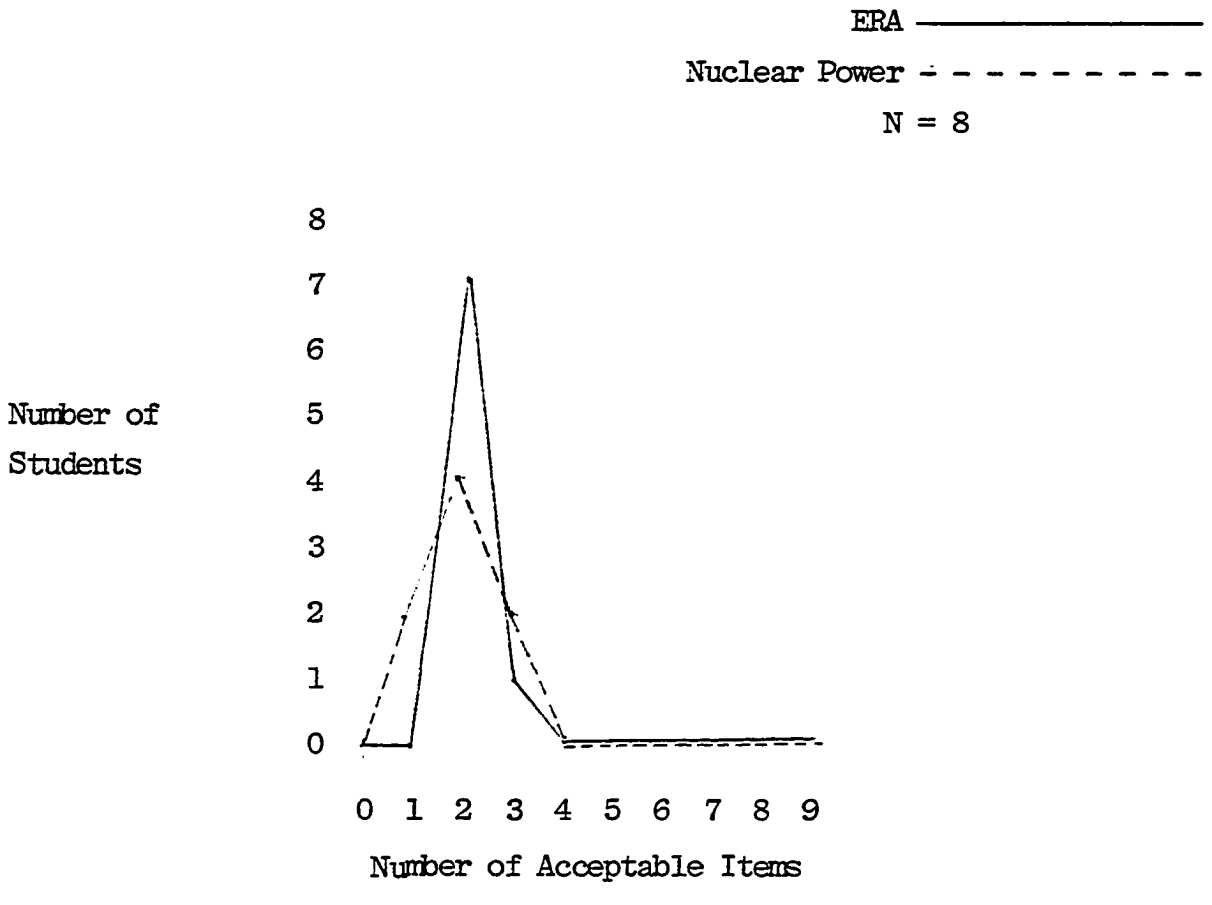


Figure 5

Latitude of Rejection for Males

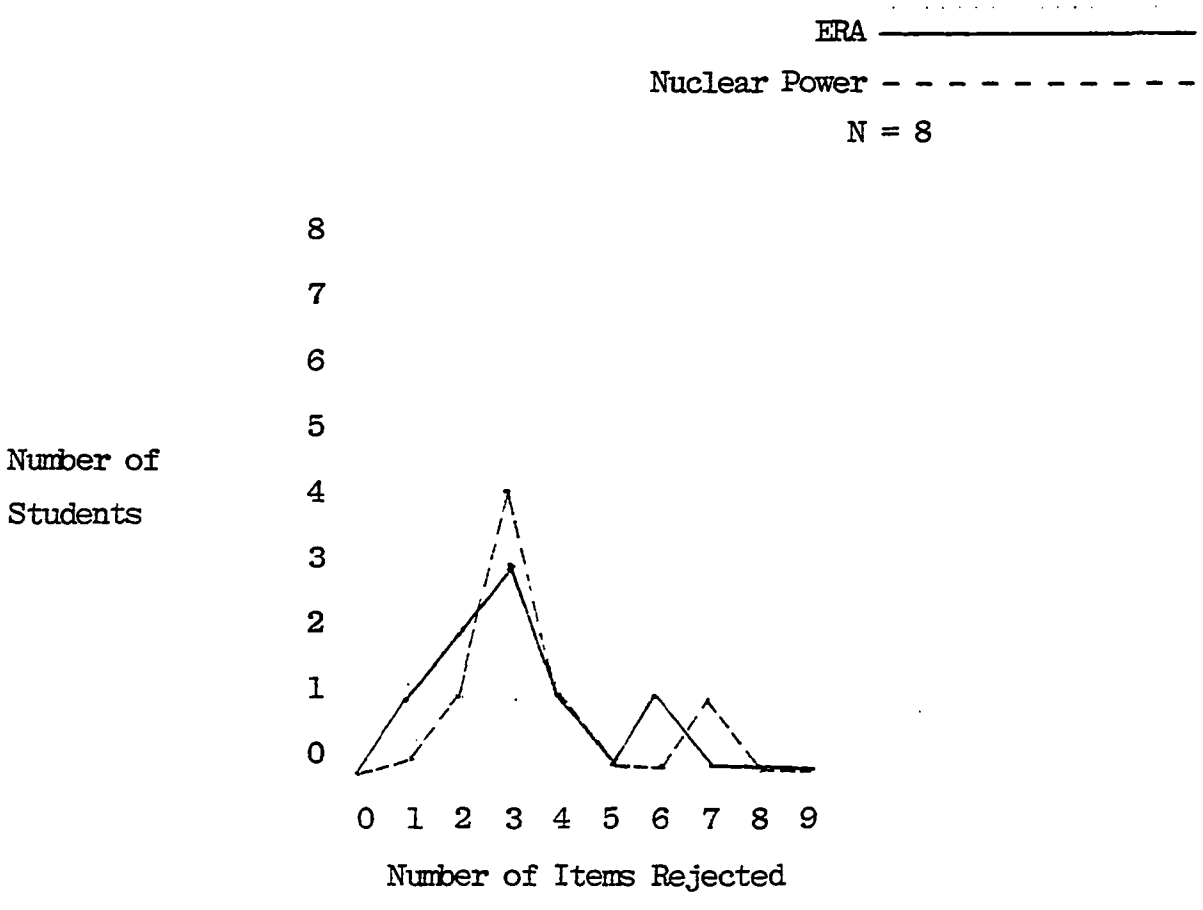
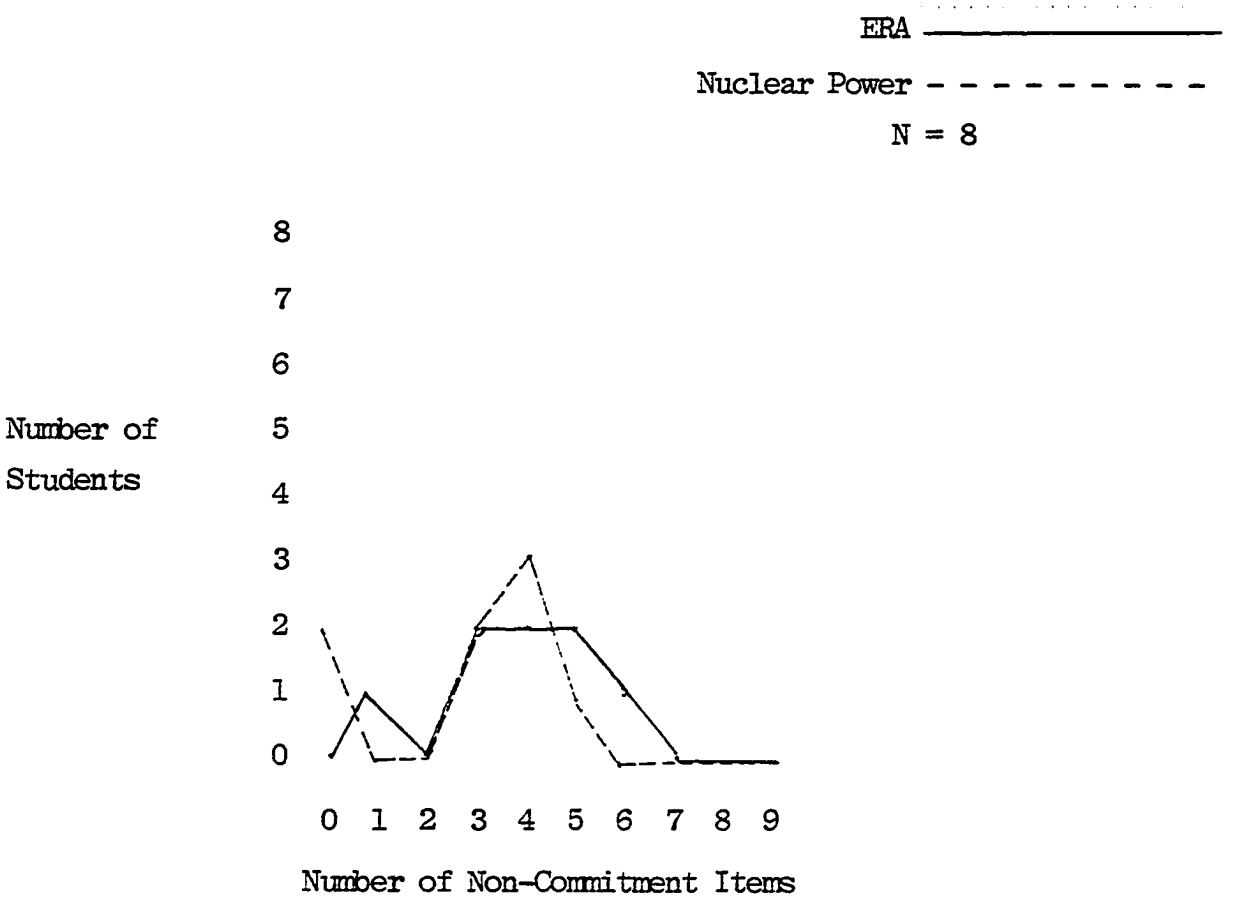


Figure 6

Latitude of Non-Commitment for Males



The mean moral dilemma scores of females indicating ego-involvement in the ERA issue (Table 2) show an increase of 2.5 from mean raw scores on the DIT to the ERA dilemmas. The raw mean scores on the DIT were 12.25 and 14.75 on ERA Dilemmas.

TABLE 2

RAW SCORES AND P-SCORES FOR EGO-INVOLVED FEMALES ON DIT AND ERA DILEMMAS

	LR=4 or More				
	DIT		ERA Dilemmas		
Student	Raw Score	P-Score	Raw Score	P-Score	Position*
1	15	P = .50	17	P = .56	+
2	19	P = .63	21	P = .70	+ (slight)
3	9	P = .30	17	P = .56	+
4	11	P = .36	11	P = .36	+ (slight)
5	8	P = .27	16	P = .53	-
6	8	P = .27	11	P = .36	0
7	19	P = .63	17	P = .56	0
8	9	P = .30	8	P = .27	0

TABLE 3

RAW SCORES AND P-SCORES FOR EGO-INVOLVED MALES ON THE DIT AND ERA DILEMMAS

	LR=4 or More				
	DIT		ERA Dilemmas		
Student	Raw Score	P-Score	Raw Score	P-Score	Position*
1	11	P = .36	19	P = .63	+
2	13	P = .43	15	P = .50	0

* + = Positive 0 = Non-Involved - = Negative

The raw mean scores on the DIT were 12 and 17 on ERA Dilemmas. Those females indicating involvement of a positive or negative nature show an increase in scores, with only one subject showing no change. Two of the three females indicating involvement of a neutral type show a drop in scores with one showing an increase.

Since only two males indicated involvement in the ERA issue, it is difficult to try to indicate any type of tendency. There was an increase in scores from the DIT to ERA Dilemmas.

TABLE 4

MEANS FOR FEMALE AND MALE EGO-INVOLVED STUDENTS ON THE DIT AND ERA DILEMMAS

		DIT Dilemmas	ERA Dilemmas
Female (involved)	$\bar{x}$ N=8	12.25	14.75
Male (involved)	$\bar{x}$ N=2	12.0	17.0

TABLE 5

MEANS FOR FEMALE AND MALE STUDENTS FOR THE TOTAL SAMPLE ON THE DIT AND ERA DILEMMAS

		DIT Dilemmas	ERA Dilemmas
Female (total)	$\bar{x}$ N=25	13.1	14.25
Male (total)	$\bar{x}$ N=7	10.6	13.3

Both males and females who indicate involvement with the ERA issue show a greater gain from the DIT Dilemmas to the ERA Dilemmas than are indicated in the total sample.

The mean moral dilemma scores of females indicating ego-involvement in the nuclear power issue show an increase of 4.38 from mean raw scores on the DIT to the nuclear dilemmas. The raw mean scores on the DIT were 12.83 and 17.17 on the nuclear dilemmas.

TABLE 6

RAW SCORES AND P-SCORES FOR EGO-INVOLVED FEMALES ON DIT AND NUCLEAR DILEMMAS

	LR=4 or More				
Student	DIT Raw Score	P-Score	Nuclear Dilemmas Raw Score	P-Score	Attitudinal Position*
1	9	P = .30	19	P = .63	+
2	15	P = .50	22	P = .73	0
3	9	P = .30	11	P = .36	0
4	11	P = .36	15	P = .50	0
5	19	P = .63	20	P = .67	0
6	14	P = .46	16	P = .53	0

TABLE 7

RAW SCORES AND P-SCORES FOR EGO-INVOLVED MALES ON DIT AND NUCLEAR DILEMMAS

	LR=4 or More				
Student	DIT Raw Score	P-Score	Nuclear Dilemmas Raw Score	P-Score	Attitudinal Position
1	13	P = .43	18	P = .60	0
2	19	P = .63	18	P = .60	0
3	11	P = .36	19	P = .63	0

* + = Positive 0 = Non-Involved - = Negative

The raw mean scores for males on the DIT were 14.33 and 18.33 for nuclear dilemmas. Those females indicating involvement in the nculear power issues all show an increase in scores. One of the six female subjects maintained a positive position on the nuclear issue; the rest were all neutral. The three involved males indicated a neutral position also. Two of the three showed a gain in raw scores from the DIT to the nuclear dilemmas; the third showed a slight loss.

TABLE 8

RAW SCORE MEANS FOE EGO-INVOLVED STUDENTS AND THE TOTAL SMAPLE ON THE DIT AND NUCLEAR DILEMMAS

	DIT	Nuclear Dilemmas
Female $\bar{x}$ N=6 (involved)	12.83	17.77
Male $\bar{x}$ N=3 (involved)	14.33	18.33
Female $\bar{x}$ N=25 (total)	13.1	15.5
Male $\bar{x}$ N=7 (total)	10.6	19.0

Both males and females who indicate involvement with the nuclear power issue show a greater difference in the DIT dilemmas and the nuclear power dilemmas than are indicated in the total sample.

The change in scores on the nuclear dilemmas seems to be greater than the gain in scores on the ERA dilemmas. The involvement as measured

on the nuclear dilemma was neutral among involved subjects with one exception; one female indicated a positive involvement. A possible explanation for this discrepancy may be a problem with the nuclear instrumentation (see Appendix C), while the nuclear dilemmas dealt with health and safety factors, the ego involvement instrument did not utilize either health or safety in order to determine involvement. There is, therefore, an inadequate follow through of assumptions connecting the ego-involvement instrument with the moral dilemma instrument on the nuclear issue.

Students indicated limited behavioral involvement in the behavioral measures associated with the ego-involvement instrumentation. This was in keeping with the relatively low level of ego-involvement in both issues. The most commonly indicated behavior was reading literature in favor of or against the issue. Only one student indicated participation in a pro-ERA rally. It was this same student who listed the only response to the open ended behavioral item that being the participation in ERA discussion groups.

Because of the limited number of subjects whose scores on the ego-involvement instruments could identify them as ego-involved, a different method for obtaining subjects is necessary. In order to identify ego-involved individuals, it seems logical to utilize some individuals who are members of "known groups," that is those groups who actively maintain a public position on the issue in question. This would, hopefully, eliminate the difficulty in obtaining clear commitment to the position in question. Furthermore, a change in the ERA Ego-Involvement instrument dealing with the issues of ERA may be more successful in eliciting involvement. The proposed revision follows the instrumentation (Appendix C).

Because of the lack of response on the behavioral index measure and because it does not directly answer any research question, it is proposed that the instrument not be used in the study. Because of inadequate follow through of assumptions between nuclear dilemma and ego involvement instrumentation, it is also proposed that this section of the study be eliminated. In further support for the elimination of the above measures, there was a necessity for cutting down on the length of the testing, since to go through all sections was a tedious process.

The proposed research, therefore, utilizes the short form DIT, the ERA Dilemmas, and a more issue oriented form of the ERA Ego-Involvement instrument.

APPENDIX C

Instruments

Oral Instructions for Ego-Involvement Instruments

The questionnaires you are filling out in general deal with the feelings of college students toward various contemporary issues. Please listen to the instructions I am about to read and answer the items as honestly as you can reflecting your opinion. You will identify yourself by a code name known only to yourself, so that your answers are totally anonymous. Thank you very much for your cooperation. Would you look at the first questionnaire please.

Read each of the nine statements on the issue carefully. You will have slightly over a minute.

Pause

After reading carefully the nine statements, put the letters "MA" (most acceptable) next to the one statement which comes closest to your stand on this issue.

Pause

Next put an "A" (acceptable) next to any other statement or statements which are also acceptable to you from your point of view.

Pause

Next put the letters "MO" (most objectionable) next to the one statement which is most objectionable to you from your point of view.

Pause

Finally, put the letter "O" (Objectionable) next to any other statement or statements which are also objectionable to you from your point of view.

Pause

Would you turn the page and answer the questions by indicating "yes" or "no." If there are any other activities you have participated in regarding the issue, please identify them at the bottom of the page.

(The instructions are repeated for the second issue.)

ERA Ego-Involvement Instrument

WHAT IS YOUR OPINION?

A. Passage of the Equal Rights Amendment is absolutely essential to insure equal treatment under the law for all individuals.

B. Passage of the Equal Rights Amendment is extremely essential to insure equal treatment under the law.

C. Passage of the Equal Rights Amendment is essential to insure equal treatment under the law for all individuals.

D. Although it's hard to decide, the passage of the Equal Rights Amendment would probably help to insure equal treatment under the law.

E. From the point of view of insuring equal treatment under the law to all individuals it is difficult to decide if the passage of the Equal Rights Amendment is essential or detrimental.

F. Although it's hard to decide, the passage of the Equal Rights Amendment would probably be detrimental to the insurance of equal treatment under the law.

G. Passage of the Equal Rights Amendment would definitely be detrimental to the insurance of equal treatment under the law for all individuals.

H. Passage of the Equal Rights Amendment would be extremely detrimental to the insurance of equal treatment under the law for all individuals.

I. Passage of the Equal Rights Amendment would be absolutely detrimental to the insurance of equal treatment under the law.

ERA Behavioral Index

PLEASE ANSWER THE FOLLOWING

YES	NO		
_____	_____	1.	Have you ever written a letter to a legislator supporting passage of ERA?
_____	_____	2.	Have you ever written a letter to a legislator criticizing passage of ERA?
_____	_____	3.	Have you ever attended a rally supporting ERA?
_____	_____	4.	Have you ever attended a rally to halt passage of ERA?
_____	_____	5.	Have you ever read any pro-ERA literature?
_____	_____	6.	Have you ever read any anti-ERA literature?
_____	_____	7.	Do you display a pro-ERA bumper sticker on your car?
_____	_____	8.	Do you display an anti-ERA bumper sticker on your car?

What are some (if any) things you have done which reflect your position on ERA?

Nuclear Ego-Involvement Instrument

WHAT IS YOUR OPINION?

A. Nuclear energy is absolutely essential in order to insure the fulfillment of future energy needs.

B. Nuclear energy is extremely essential to fulfill future energy needs.

C. Nuclear energy is essential to fulfill future energy needs.

D. Although it's hard to decide, nuclear energy is probably essential to fulfill future energy needs.

E. From the point of view of fulfilling future energy needs, it is difficult to decide if nuclear energy is essential or detrimental.

F. Although it's hard to decide, nuclear energy is probably detrimental to fulfill future energy needs.

G. Nuclear energy is definitely detrimental to the fulfillment of future energy needs.

H. Nuclear energy is extremely detrimental to the fulfillment of future energy needs.

I. Nuclear energy is absolutely detrimental to the fulfillment of future energy needs.

Nuclear Behavioral Index

Please answer the following questions.

YES	NO		
_____	_____	1.	Have you ever contacted a legislator expressing your support of nuclear energy?
_____	_____	2.	Have you ever contacted a legislator expressing your criticism of nuclear energy?
_____	_____	3.	Have you ever attended a rally in support of nuclear energy?
_____	_____	4.	Have you ever attended a rally which was critical of nuclear energy?
_____	_____	5.	Have you read any literature in support of nuclear energy?
_____	_____	6.	Have you ever read any literature which was critical of nuclear energy?
_____	_____	7.	Do you have a bumper sticker on your car expressing your support of nuclear energy?
_____	_____	8.	Do you have a bumper sticker on your car expressing your criticism of nuclear energy?

In what other ways (if any) have you done things which express your position on nuclear energy?

Defining Issues Test — Short Form

OPINIONS ABOUT SOCIAL PROBLEMS

This qeustionnaire is aimed at understanding how people think about social problems. Different people often have different opinions about questions of right and wrong. There are no "right" answers in the way that there are right answers to math problems. We would like you to tell us what you think about several problem stories. It is essential to this research that you answer each item carefully and with consideration. Since all research participants remain anonymous, there will be no information compiled about identifiable individuals.

In this questionnaire you will be asked to give your opinions about several stories. Here is a story example. Read it, then turn to the next page.

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. On the next page there is a list of some of these questions.

After you work through the sample items on Frank Jones, answer the remaining story problems in the same way.

If you were Frank Jones, how important would each of these questions be in deciding what car to buy?

Part A. (Sample)

On the left hand side of the page check one of the spaces by each question that could be considered.

Great Importance	Much Importance	Some Importance	Little Importance	No Importance	
___	___	___	___	___	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 commibilies were differential.

Part B. (Sample)

From the list of questions above, select the most important one of the whole group. Put the number of the most important question on the top line below. Do likewise for your second, third, and fourth most important choices.

Most important _____
Second most important _____
Third most important _____
Fourth most important _____

HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that the 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 $2000 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 $1000, 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? (Check one)

_____Should steal it

_____Can't decide

_____Should not steal it

Great Importance	Much Importance	Some Importance	Little Importance	No Importance	
					HEINZ STORY: On the left hand side of the page check one of the spaces by each question to indicate its importance.
___	___	___	___	___	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.

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

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 8 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 8 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? (Check one)

_____Should report him

_____Can't decide

_____Should not report him

ESCAPED PRISONER

Great Importance	Much Importance	Some Importance	Little Importance	No Importance	
___	___	___	___	___	1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
___	___	___	___	___	2. Every time 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 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?

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

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 war in Viet Nam 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? (Check one)

_____Should stop it

_____Can't decide

_____Should not stop it

NEWSPAPER

Great Importance	Much Importance	Some Importance	Little Importance	No Importance		
___	___	___	___	___	1.	Is the principal more responsible to students or 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 students' 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.

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

ERA Moral Dilemmas

NAVY DUTY

Lt. Anne Hamilton is a Navy officer of several years. She has served well and has an outstanding record. She recently applied for sea duty with the surface Navy, and very much hopes to be able to go to sea. While Lt. Hamilton's commanding officer is aware that official Naval policy is to consider women for short term deployment, he is also aware that the informal system tries to discourage these requests, even to the point of denying such requests on other grounds. Though the commanding officer feels Lt. Hamilton is well qualified for the positions, he is also aware that his recommendation would challenge the informal system.

Should the commanding officer recommend Lt. Hamilton for sea duty? (Check one)

_____Should recommend her for sea duty

_____Can't decide

_____Should not recommend her for sea duty

NAVY DUTY: Which statements are important to the commanding officer's decision?

Great Importance	Much Importance	Some Importance	Little Importance	No Importance		
___	___	___	___	___	1.	If Lt. Hamilton has served so well, shouldn't she be rewarded for her service?
___	___	___	___	___	2.	Could granting such request, which may alter policy, open the door for lesser deserving women?
___	___	___	___	___	3.	Wouldn't the Navy be better off without useless traditions and policies?
___	___	___	___	___	4.	Does Lt. Hamilton really deserve to be recommended for sea duty according to Navy policy?
___	___	___	___	___	5.	Is individual accomplishment really rewarded in a competitive system?
___	___	___	___	___	6.	What are the qualities which are valued in a Navy officer and how should these influence policy?
___	___	___	___	___	7.	Would it cause disapproval and criticism from the commanding officer's superiors if he approves the request?
___	___	___	___	___	8.	Is it fair to other women officers who have not gotten to go to sea, because they respect Navy traditions?
___	___	___	___	___	9.	Was the commanding officer a good friend of Lt. Hamilton?
___	___	___	___	___	10.	Isn't it the commanding officer's duty to respect and uphold the tradition of the Navy which he has promised to support?
___	___	___	___	___	11.	How would the welfare of all Navy officers and the public good best be served?
___	___	___	___	___	12.	Would letting Lt. Hamilton go to sea do any harm to her or violate the rights of anyone else?

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

PAY SCALE

Janette Maxwell is a teacher in a small liberal arts private school in the midwest. She has become concerned over the pay scale. Unmarried men and women are in the same pay category, but men who are married and have families have a pay scale which is progressively larger corresponding to their family size. Though these differences in pay scale relative to family size are not great, they do not apply to women. Women and men have the same pay scale increases with regard to experience and academic advancement. Though the headmaster is sympathetic toward the concern expressed by Janette, he is reluctant to confront a traditional board of directors.

Should the headmaster confront the Board of Directors with Janette's concern? (Check one)

_____Should confront the Board

_____Can't decide

_____Should not confront the Board

Great Importance	Much Importance	Some Importance	Little Importance	No Importance		PAY SCALE: Which statements are important in the headmaster's decision?
___	___	___	___	___	1.	Is the headmaster more responsible to the faculty or the board of directors?
___	___	___	___	___	2.	Was the pay scale completely explained and agreed to by Janette before she was hired?
___	___	___	___	___	3.	Would Janette file suit if the headmaster doesn't confront the board?
___	___	___	___	___	4.	Whether the headmaster is obligated to maintain the long-standing policy of the school.
___	___	___	___	___	5.	Whether tradition and progress are mutually exclusive concepts.
___	___	___	___	___	6.	If the headmaster does not confront the board of directors, will he be preventing the discussion of an important social issue?
___	___	___	___	___	7.	Whether the board would lose faith in the headmaster if he confronts them.
___	___	___	___	___	8.	Whether Janette's motives are just selfish ones.
___	___	___	___	___	9.	What effect would not presenting Janette's concern to the board of directors have on the welfare of the faculty and future faculty members?
___	___	___	___	___	10.	Whether Janette is in any way violating the rights of the other faculty members who benefit from family allotments.
___	___	___	___	___	11.	Whether the headmaster should be influenced by Janette's concern or should follow school policy.
___	___	___	___	___	12.	Whether Janette is a troublemaker just trying to stir up militant behavior.

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

CHILD CUSTODY

Judge John Henley is presiding before a civil court in which he must make a decision awarding custody of a five year old child to either his mother or his father. According to the laws of the state, custody of the child most go to the mother except under the most extreme circumstances when there is proof that the mother is unfit to care for the child. Though the Judge feels strongly that it is in the best interest of the child that custody go to the father, he feels that he is without substantial proof to proclaim the mother unfit.

Should the Judge award custody to the father? (Check one)

_____Should award custody to the father

_____Can't decide

_____Should not award custody to the father

Great Importance	Much Importance	Some Importance	Little Importance	No Importance	CHILD CUSTODY: Which statements are important to the Judge's decision?
___	___	___	___	___	1. Whether a community's laws are going to be upheld.
___	___	___	___	___	2. The Judge should give the child to the father so the child can be happy.
___	___	___	___	___	3. Whether the Judge is of strong religious background.
___	___	___	___	___	4. Is the Judge willing to risk being overruled for his decision if he rules in favor of the father?
___	___	___	___	___	5. Whether the Judge's principle responsibility is supporting the laws of the state.
___	___	___	___	___	6. If the Judge's decision will be approved by his peers.
___	___	___	___	___	7. Whether happiness is a human right for all individuals regardless of age.
___	___	___	___	___	8. What values are to be the basis for determining a suitable environment for a child?
___	___	___	___	___	9. Whether the law in this case is getting in the way of a basic claim of any member of society.
___	___	___	___	___	10. Whether the mother deserves to have her child for her past behavior.
___	___	___	___	___	11. Could the Judge's awarding the child to the father bring about a more total good for the whole society?
___	___	___	___	___	12. Whether the Judge should hide behind a worthless law which only protects undeserving people.

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

Nuclear Moral Dilemmas

PLANT CONSTRUCTION

The president of a local union in a small midwestern town has been in support of the construction of a nuclear plant in his community. He felt that the plant would take care of the energy needs of his community as well as provide many jobs for union employees. Recently a group of medical professionals expressed a concern for the health of prospective plantworkers as well as the entire community. The union president now needs to decide whether to support the plant's construction, which would provide an economic boost to the community, or not support plant construction in light of concern for the health of workers and the community.

Should the union president support plant construction? (Check one)

_____Should support plant construction

_____Can't decide

_____Should not support plant construction

Great Importance	Much Importance	Some Importance	Little Importance	No Importance	
					PLANT CONSTRUCTION: How important would each of these questions be in deciding whether to support or not support plant construction?
___	___	___	___	___	1. Whether the plant's construction would violate any community law.
___	___	___	___	___	2. Whether his union membership will favor his decision.
___	___	___	___	___	3. Whether he may be fired for taking an unpopular position.
___	___	___	___	___	4. Whether the future of the world can be dealt with in tangible issues.
___	___	___	___	___	5. Whether the union president is considering the membership or his own personal gain.
___	___	___	___	___	6. Whether community standards would be upheld.
___	___	___	___	___	7. Whether energy is a justifiable concept for practical decisions made currently which will influence the future.
___	___	___	___	___	8. How are the considerations for human safety both present and future balanced with human energy needs, and what basic values are associated with both?
___	___	___	___	___	9. Whether the power plant is just going to exploit the community for immediate gain.
___	___	___	___	___	10. Whether individual human rights would be violated by the possibility of environmental upset.
___	___	___	___	___	11. Whether power plant officials deserve support if they have been deceptive.
___	___	___	___	___	12. Could the plant construction bring about more total good for the whole community or not?

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

REACTOR SAFETY

A public service company engineer has the same serious questions concerning the cooling system of a nuclear plant now under construction on which he has worked long and hard. The nuclear plant cooling system relies heavily on water from a nearby river. An adjacent state is considering the construction of a dam on the river which could affect the flow of the river. The engineer feels that the construction of a water storage facility may be essential to the safe operation of the plant. However, the construction is now seriously over budget and the added construction costs would probably halt the project.

Should the engineer recommend construction of the water storage facility? (Check one)

_____Should recommend construction

_____Can't decide

_____Should not recommend construction

Great Importance	Much Importance	Some Importance	Little Importance	No Importance		REACTOR SAFETY: How important are each of these questions in the engineer's decision?
___	___	___	___	___	1.	Shouldn't the engineer do what his employers expect of him?
___	___	___	___	___	2.	Whether the engineer should maintain the standards of the community.
___	___	___	___	___	3.	Aren't power companies out for profit rather than to do good for the community anyway?
___	___	___	___	___	4.	Whether there is any violation of the law involved.
___	___	___	___	___	5.	What are the values involved in personal needs vs. public good and what are the potential outcomes of each?
___	___	___	___	___	6.	Are the concepts of honor and responsibility reflected in society's needs?
___	___	___	___	___	7.	Would the engineer be supported by his peers if he makes the recommendation?
___	___	___	___	___	8.	Is it fair to the community not to make the recommendation?
___	___	___	___	___	9.	Would the engineer get in trouble for slowing down or stopping construction if he recommends the construction of the water facility?
___	___	___	___	___	10.	Isn't it the engineer's duty to make the recommendation regardless of the consequences?
___	___	___	___	___	11.	How would the will of the people and the public good best be served?
___	___	___	___	___	12.	Would the engineer's recommendation do any good for anybody or protect anybody?

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

ENERGY SOURCES

The mayor of a midwestern community has asked a committee to explore the possible sources of added energy the growing community needs both currently and in the future. She found that the committee was sharply divided with one group supporting solar, wind, biomass (the generation of methane gas from organic waste), and geothermal energy sources as safe, economical, and available. The other group strongly supported nuclear energy as a more practical alternative and one which could be implemented with the construction of a nuclear plant. After listening to multi-media presentations and various experts, and outside demonstrators support and attack both groups, she was undecided in what energy source seemed best. Though nuclear energy seemed to be the most proven and practical, she had serious concerns about community health and waste disposal.

Should the mayor support nuclear energy for her community? (Check one)

_____Should support nuclear energy

_____Can't decide

_____Should not support nuclear energy

Great Importance	Much Importance	Some Importance	Little Importance	No Importance		
						ENERGY SOURCES: How important are each of these questions in the mayor's decision?
___	___	___	___	___	1.	How will the community standards best be upheld?
___	___	___	___	___	2.	Did the mayor promise to support one group or the other?
___	___	___	___	___	3.	Could the mayor face impeachment if she supports an unpopular position?
___	___	___	___	___	4.	When the welfare of the community is in question, does the mayor have the right to challenge her appointed committee?
___	___	___	___	___	5.	Should the considerations of freedom of speech be a prime concern of officials?
___	___	___	___	___	6.	If the mayor supports nuclear power will it be in the best interest of society in general?
___	___	___	___	___	7.	Whether her decision will make others angry with her.
___	___	___	___	___	8.	Whether nuclear supporters on the committee are motivated out of loyalty.
___	___	___	___	___	9.	How will the welfare of the community best be served?
___	___	___	___	___	10.	If the mayor supports nuclear energy, will she in any way violate the rights of others?
___	___	___	___	___	11.	Whether the mayor should be influenced by angry, biased people when she knows what is best for the community.
___	___	___	___	___	12.	Whether the mayor will receive peer support for her decision.

From the list of questions above, select the four most important:

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

Revised ERA Ego-Involvement Instrument

WHAT IS YOUR OPINION?

A. In order to improve the standard of life for all individuals, it is absolutely essential for men and women to be treated the same legally.

B. In order to improve the standard of life for all individuals, it is extremely essential for men and women to be treated the same legally.

C. In order to improve the standard of life for all individuals, it is essential for men and women to be treated the same legally.

D. Although it is hard to decide, treating men and women the same legally would probably improve the standard of life for all individuals.

E. From the point of view of improving the standard of life for all individuals, it is difficult to decide if treating men and women the same legally is essential or detrimental.

F. Although it is hard to decide, treating men and women the same legally would probably be detrimental to improving the standard of life for all individuals.

G. In order to improve the standard of life for all individuals, treating men and women the same legally would be detrimental.

H. In order to improve the standard of life for all individuals, treating men and women the same legally would be extremely detrimental.

I. In order to improve the standard of life for all individuals, treating men and women the same legally would be absolutely detrimental.

APPENDIX D

Sample Data

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Total Sample Descriptive Information

Two hundred forty-eight students were administered the DIT, the ERA Ego-Involvement Instrument and the ERA Situational Dilemmas. Thirty-five of those were eliminated due to incomplete, or inaccurate information on the instruments. The total sample for consideration was two hundred thirteen. One hundred seventy-three of the total sample were from Education and forty from Sociology. One hundred forty-nine were female and sixty-four male. One hundred fifty-one were High-Ego Involved, while sixty-two were Low-Ego Involved.

TABLE 1

TOTAL SAMPLE BREAKDOWN OF NUMBER OF STUDENTS BY EGO-INVOLVEMENT, ATTITUDE, CLASS, AND GENDER

High-Ego Involvement

Attitude Class	Positive		Non-Involved		Negative	
	Education	Sociology	Education	Sociology	Education	Sociology
Male	20	4	24	0	10	0
Female	22	32	13	4	22	0
Total	42	36	37	4	32	0

Low Ego-Involvement

Attitude Class	Positive		Non-Involved		Negative	
	Education	Sociology	Education	Sociology	Education	Sociology
Male	11	0	6	0	0	0
Female	10	0	28	0	7	0
Total	21	0	34	0	7	0

In order to determine if there were any existing differences in class (education or sociology) or gender, an analysis of variance was conducted on the sample. The DIT has an internal validity check and twelve of the two hundred and thirteen were eliminated due to faulty answering patterns. For the purposes of this research classification by P-level on the DIT was an essential component. Classification into the high or low P-group was achieved by utilizing the median score, therefore the Median Score was not utilized in order to determine descriptive group information. This eliminated sixteen score's from the sample, leaving a corrected sample of one hundred eight-five.

TABLE 2

CORRECTED SAMPLE MEANS AND STANDARD DEVIATIONS BY P-GROUP, GENDER, AND CLASS ON THE DIT

Gender		Female		Male	
Class		Education	Sociology	Education	Sociology
High-P					
	$\bar{x}$	38.36	33.87	34.92	35.0
	S	9.26	14.8	8.86	2.82
	N	49	16	28	2
Low-P					
	$\bar{x}$	9.61	10.81	11.12	
	S	5.14	6.36	5.59	
	N	49	16	25	0

TABLE 3

CORRECTED SAMPLE MEANS AND STANDARD DEVIATIONS BY P-GROUP, GENDER, AND CLASS ON ERA MORAL DILEMMAS

Gendor / Class		Female		Male	
		Education	Sociology	Education	Sociology
High-P					
	$\bar{x}$	34.14	25.68	26.85	37.0
	S	14.44	11.20	11.22	0
	N	49	16	28	2
Low-P					
	$\bar{x}$	13.02	14.25	13.44	
	S	10.01	6.22	10.37	
	N	49	16	25	0

An analysis of variance of gender and class on the DIT produced no significant interaction or main effects (Table 4). Though the analysis of variance of gender and class on the ERA Dilemmas (Table 5) did produce a significant interaction, it was not interpreted due to an inadequate number of male sociology students (Table 3). The analysis of variance was conducted for the corrected sample using median scores.

TABLE 4

ANALYSIS OF VARIANCE ON DIT BY CLASS AND GENDER

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	F Value	Significance of F
Main Effects					
gender	12.55	1		.06	.81
class	8.31	1		.04	.84
Interaction					
gender class	298.72	1		1.3	.25
Explained	314.60	3	104.86	.47	.71
Error	44373	197	225.24		
Total	44687.59	200			

TABLE 5

ANALYSIS OF VARIANCE ON ERA DILEMMAS BY CLASS AND GENDER

Source of Variance	Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance of F
Main Effects					
gender	172.20	1		.84	.36
class	63.63	1		.31	.57
Interaction					
gender class	803.79	1		3.93	.048
Explained	1039.63	3	346.54	1.69	.17
Error	40337.13	197	204.76		
Total	41376.76	200			

Also of interest to the nature of this research is the relationship between the DIT and the ERA Dilemmas. For the total uncorrected sample of two hundred thirteen, the DIT and ERA dilemmas had a correlation of .67 (Figure 1). The sample utilized for research was drawn from the corrected sample and produced a relationship between the DIT and ERA Dilemmas of .83 (Figure 2). The slight discrepency in correlation values may be due to difference in sample size and the fact that the research sample was selected from a corrected subject pool which should have contributed the elemination of error.

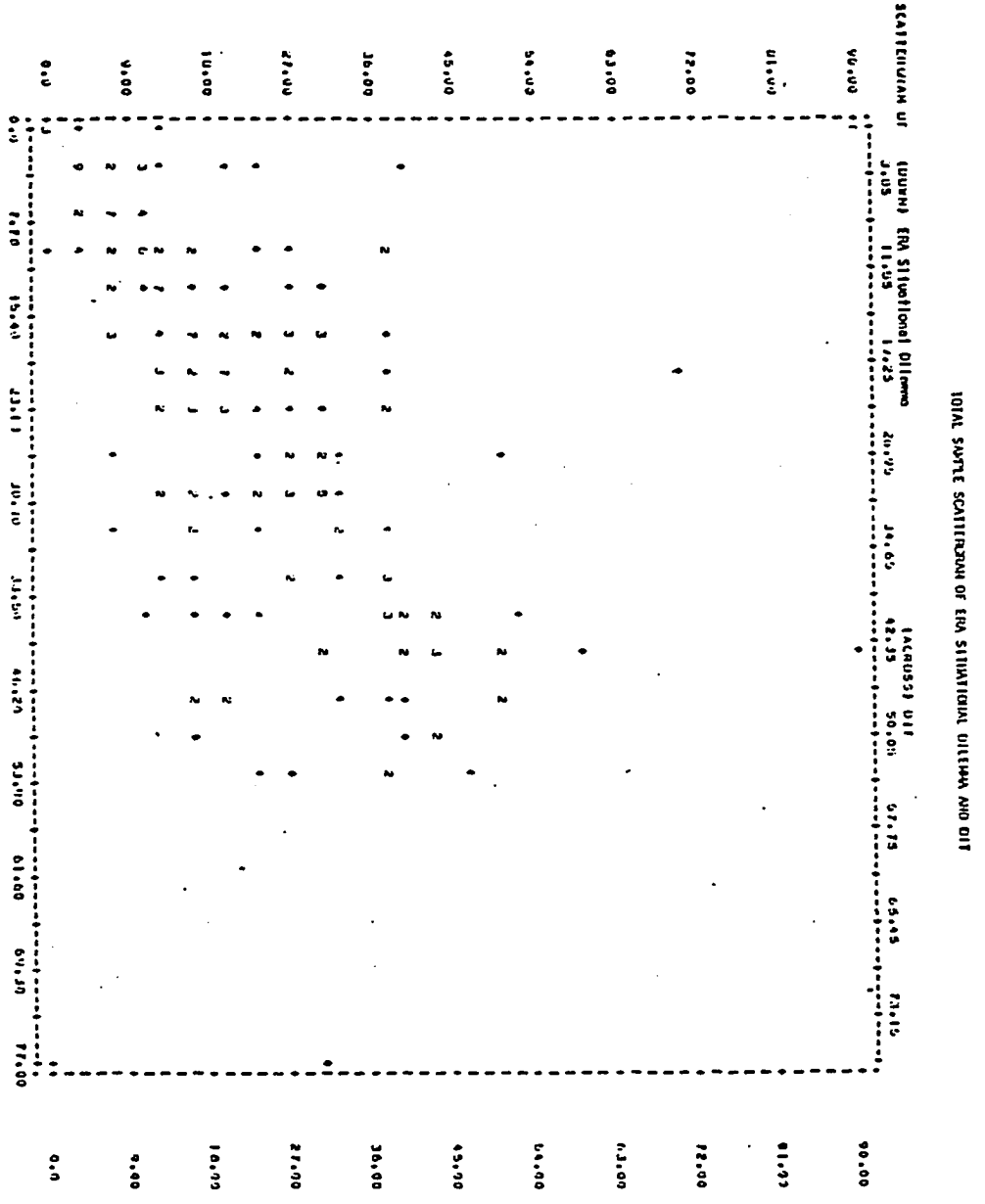

Figure 1

Total Sample Scattergram of ERA Dilemmas and DIT

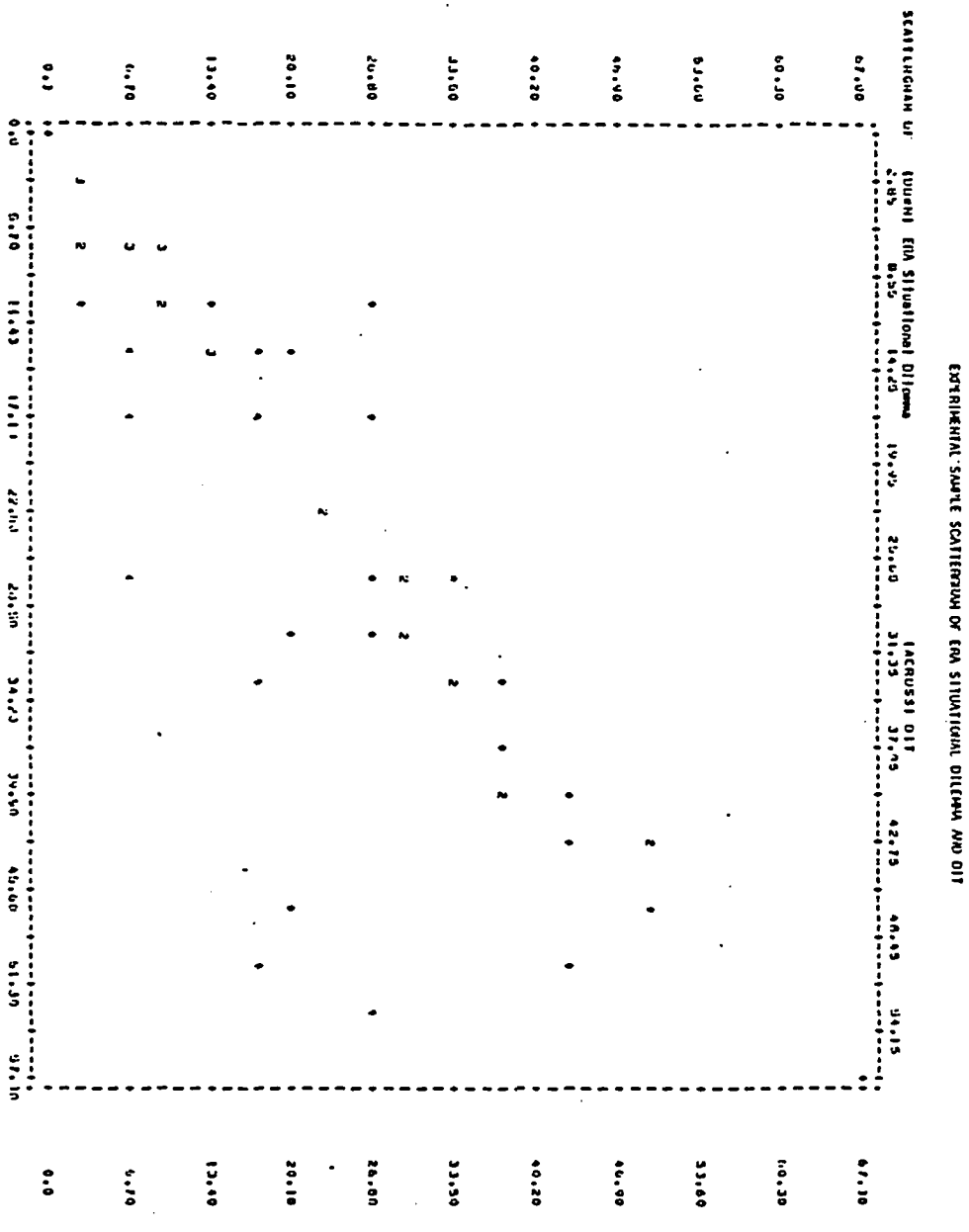

Figure 2

Research Sample Scattergram of ERA Dilemmas and DIT

APPENDIX E

Computer Scoring Program for the Defining Issues Test and ERA Moral Dilemmas and Sample Data

SCORING PROGRAM FOR DIT AND ERA DILEMMAS

The following program is designed to yield a P-score for both the DIT and ERA Dilemmas. Subscores and P-scores for both the DIT and ERA Dilemmas are produced on two lines for each subject. The first set of scores in the following data is for the DIT and the second for ERA Dilemmas. The ID indicates first, gender (0=female, 1=male), second, class (0=education, 1=sociology), and ego-involvement position and attitude, (1=HEI, Positive, 2=HEI, Non-Involved, 3=HEI, Negative, A=LEI, Positive, 5=LEI, Non-Involved, and 6=LEI Negative).

SCORING PROGRAM FOR DIT AND ERA SITUATIONAL DILEMMAS

```
      DIMENSION KEY(12,3,2),NRES(4,3,2),NSCORE(9,3  ),NSTAGE(9,2)
      REAL *8 ID,CK
      DATA CK/'99999'/
       NP = 4
      NS = 9
      J1=1
      J2=J1+2
      NN=0
      PRINT 2
2     FORMAT(1CX,'ID',5X,'STAGE  2  3  4 SA SB  6  A  M  P'/// )
      READ (5,100) (((KEY(I,J,L),I=1,12),J=1,J2), L=1,2)
  100 FORMAT(1X,6(1X,12I1))
220   CONTINUE
      NN =    NN + 1
      READ 50,ID,(((NRES(J,K,L),J=1,NP),K=1,J2) ,L=1,2)
   50 FORMAT (A5,2(3(1X,4I2),1X))
      IF (ID.EQ.CK)GO TO 500
      DO 200   L=1,2
      DO 70 J=J1,J2
      DO 30 I=1,NS
      NSTAGE(I,L)=0
30    NSCORE(I,J)=0
      DO 70 I=1,NP
      II = NRES(I,J,L)
      IF (II.GT.12.OR. II .LT.1) GO TO 99
      JJ = KEY(II,J,L)
70    NSCORE(JJ,J)=5-I  +NSCORE(JJ,J)
      DO 80 I=J1,J2
120   NSCORE(5,I)=            NSCORE(4,I)+NSCORE(5,I)+NSCORE(6,I)
      DO 80 J=1,8
80    NSTAGE(J,L)=NSTAGE(J,L)+NSCORE(J,I)
      NSTAGE(9,L)=( NSTAGE(4,L)+NSTAGE(5,L)+NSTAGE(6,L)  )*3.33333 + .49
      PRINT 7,ID,  L ,(NSTAGE(N,L),N=1,9),NN
 200  CONTINUE
7     FORMAT(1CX,A5,I6, 9I3,T71,I3)
8     FORMAT(A5,I2,18I3,T71,I3)
      GO TO 220
  500 STOP
   95 WRITE(6,60)NN,ID,NRES
   60 FORMAT('0 *  *  *'/'BAD CARD # ',I3,A5,24I4/'0 *  *  *')
      G O T O 220
      END
```

TOTAL SAMPLE DIT AND ERA SITUATIONAL DILEMMA SCORES

```
ID     STAGE  2  3  4 SA SB  6  A  M  P

00  1     1  0 12  3  7  2  4  0  2 43          DIT          1
00  1     2  0  0  1 15  4  8  0  2 90          ERA DILEMMAS 1
00  1     1  4  4  9  4  0  2  1  6 20                       2
00  1     2  0 18  4  6  0  0  0  2 20                       2
00  1     1  4  6  9  2  4  0  1  4 20                       3
00  1     2  3  0  5 11  5  5  1  0 73                       3
00  1     1  0  7  8 11  0  0  4  0 37                       4
00  1     2  0 11  5  2  0  6  0  6 27                       4
00  1     1  0 14  6  5  0  0  5  0 17                       5
00  1     2  0  9  3 11  0  0  0  7 37                       5
```

30	1	1	3	12	7	0	0	3	0	5	10	6
00	1	2	0	13	6	8	3	0	0	0	37	6
30	1	1	4	13	5	0	4	0	4	0	13	7
00	1	2	2	9	0	4	3	2	4	6	30	7
00	1	1	3	14	6	0	3	0	0	4	10	8
00	1	2	3	8	10	5	1	1	0	2	23	8
00	1	1	1	4	16	2	1	0	6	0	10	9
00	1	2	4	7	7	1	0	2	0	9	10	9
00	1	1	3	10	7	1	0	3	4	2	13	10
00	1	2	0	10	2	5	1	0	0	12	20	10
00	1	1	1	12	2	8	0	0	7	0	27	11
00	1	2	2	5	7	3	4	3	0	1	50	11
00	1	1	0	17	5	1	0	3	0	0	13	12
00	1	2	4	3	6	3	1	4	2	7	27	12
00	1	1	6	14	7	0	1	0	0	2	3	13
00	1	2	4	7	11	4	0	3	0	1	23	13
00	1	1	0	3	8	13	0	4	2	0	57	14
00	1	2	0	7	2	12	4	4	1	0	67	14
00	1	1	5	4	5	5	4	0	0	7	30	15
00	1	2	2	11	2	1	0	8	0	6	30	15
00	1	1	2	5	4	9	0	7	2	1	53	16
00	1	2	0	13	3	8	2	4	0	3	47	16
00	1	1	8	5	3	0	3	3	4	4	20	17
00	1	2	1	10	5	6	1	0	3	4	23	17
00	1	1	3	8	6	4	1	8	0	0	43	18
00	1	2	3	3	4	7	8	0	1	4	50	18
00	1	1	3	4	8	1	4	0	6	4	17	19
00	1	2	4	3	16	1	0	1	0	5	7	19
00	1	1	0	15	7	0	1	4	3	0	17	20
00	1	2	2	10	11	3	2	0	0	5	7	20
00	1	1	0	7	5	4	0	8	0	6	40	21
00	1	2	0	11	0	4	2	6	2	3	47	21
00	1	1	4	12	5	3	0	1	2	2	3	22
00	1	2	4	7	7	1	1	0	0	10	7	22
10	1	1	1	7	10	1	4	0	2	5	17	23
10	1	2	0	13	7	5	0	3	0	2	27	23
10	1	1	0	11	5	3	4	2	1	4	30	24
10	1	2	2	4	12	4	3	0	3	5	23	24
10	1	1	4	6	6	5	0	4	5	0	30	25
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10	1	1	3	12	2	4	0	3	0	0	23	26
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10	1	2	0	8	2	11	0	0	0	9	37	29
10	1	1	2	7	6	4	1	4	2	4	30	30
10	1	2	0	12	2	5	0	3	4	4	27	30
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10	1	1	4	8	10	2	0	2	0	4	13	32
10	1	2	4	8	6	0	0	4	0	6	13	32
10	1	1	0	3	11	6	1	5	0	4	40	33
10	1	2	2	5	9	3	1	7	0	3	37	33
10	1	1	1	9	12	0	0	3	5	0	10	34
10	1	2	5	8	9	0	0	1	0	7	3	34
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10	1	2	0	8	6	10	2	0	0	4	40	35

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10	1	2	1	3	4	12	6	0	1	3	60	36
10	1	1	0	15	4	0	0	1	0	10	3	37
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10	1	2	4	10	5	3	3	0	0	5	20	38
10	1	1	1	10	9	4	2	0	3	1	20	39
10	1	2	0	10	5	0	1	3	4	7	13	39
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10	1	1	0	10	8	1	0	0	3	8	3	41
10	1	2	3	8	9	0	0	4	0	6	13	41
10	1	1	2	6	14	1	0	4	2	1	17	42
10	1	2	0	12	4	0	0	4	1	8	13	42
11	1	1	0	5	7	2	0	4	1	11	20	43
11	1	2	5	1	10	3	0	1	4	6	13	43
11	1	1	0	11	4	8	2	0	5	0	53	44
11	1	2	0	12	3	5	0	6	0	4	37	44
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11	1	2	1	4	5	6	5	0	1	8	37	45
11	1	1	2	7	9	1	0	0	0	11	3	46
11	1	2	3	11	7	2	0	0	3	4	7	46
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01	1	1	4	10	12	1	0	2	0	1	10	48
01	1	2	0	9	11	0	0	4	1	5	13	48
01	1	1	1	7	9	6	0	4	1	2	33	49
01	1	2	3	7	11	2	0	0	0	7	7	49
01	1	1	4	2	13	4	2	1	4	0	23	50
01	1	2	2	11	2	5	0	0	0	10	17	50
01	1	1	1	2	11	13	0	0	2	1	43	51
01	1	2	5	0	6	8	0	1	3	7	30	51
01	1	1	3	8	11	4	0	0	4	0	13	52
01	1	2	2	13	9	2	1	0	0	3	10	52
01	1	1	0	3	14	4	0	3	2	4	23	53
01	1	2	2	5	6	0	0	6	2	9	20	53
01	1	1	4	10	8	4	1	0	0	3	17	54
01	1	2	1	3	17	0	0	6	0	3	20	54
01	1	1	2	4	10	5	0	2	0	7	23	55
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01	1	2	4	15	4	2	1	4	0	0	23	62
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01	1	2	1	13	1	3	0	0	3	9	10	64
01	1	1	4	6	9	1	2	4	0	4	23	65
01	1	2	2	13	6	2	0	3	0	4	17	65

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01	1	2	5	1	9	2	0	6	0	7	27	66
01	1	1	0	11	5	1	2	4	4	3	23	67
01	1	2	3	9	8	6	0	0	0	4	20	67
01	1	1	2	8	10	7	0	0	3	0	23	68
01	1	2	0	2	13	3	0	6	0	6	33	68
01	1	1	2	7	7	5	0	3	2	4	27	69
01	1	2	4	5	6	2	0	8	0	5	33	69
01	1	1	0	6	7	5	1	6	5	0	40	70
01	1	2	4	7	5	8	0	5	0	1	43	70
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01	1	2	2	9	13	5	0	0	0	1	17	72
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00	2	2	0	7	10	1	0	3	0	12	3	96
00	2	1	0	17	5	2	0	0	3	3	7	97
00	2	2	4	13	6	1	0	3	0	6	3	97
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00	2	2	4	9	4	2	1	2	3	5	17	98
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00	2	2	2	11	1	1	2	3	3	6	20	102
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00	3	2	0	9	5	0	0	7	0	9	23	124
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00	3	1	0	12	4	12	0	0	2	0	40	126
00	3	2	3	5	0	13	0	3	3	3	53	126
00	3	1	0	16	6	3	0	0	0	3	10	127
00	3	2	2	12	7	0	1	4	0	4	17	127
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00	3	2	0	4	15	1	0	2	0	6	10	126
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00	3	2	5	8	8	1	0	0	2	6	3	130
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00	3	2	0	9	5	4	0	7	1	4	37	131
00	3	1	0	8	2	10	0	3	3	4	43	132
00	3	2	0	11	1	1	3	6	0	6	40	132
00	3	1	0	4	11	3	0	6	1	5	30	133
00	3	2	2	6	6	3	0	4	0	9	23	133
00	3	1	4	14	8	0	2	0	0	2	7	134
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00	3	1	3	4	10	4	1	2	3	3	23	135
00	3	2	0	7	2	2	0	5	4	10	23	135
00	3	1	0	11	9	2	0	2	3	3	13	136
00	3	2	0	10	7	2	0	2	0	9	13	136
00	3	1	0	10	3	9	0	0	6	2	30	137
00	3	2	0	13	8	5	0	4	0	3	30	137
00	3	1	3	13	0	11	1	1	0	1	43	138
00	3	2	4	8	4	8	1	5	0	2	40	138
00	3	1	3	18	3	3	0	1	0	2	13	139
00	3	2	0	8	8	0	0	4	4	6	13	139
00	3	1	4	2	9	12	0	1	2	0	43	140
00	3	2	6	3	1	8	3	4	0	5	50	140
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