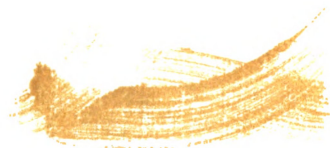


FEEDBACK OF INFORMATION AS A
DETERMINANT OF VALUE CHANGE AND THE
IMPLICATIONS OF COGNITIVE - MORAL
DEVELOPMENT FOR VALUE THEORY

Thesis for the Degree of Ph. D.
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ABSTRACT

FEEDBACK OF INFORMATION AS A DETERMINANT OF VALUE CHANGE AND THE IMPLICATIONS OF COGNITIVE- MORAL DEVELOPMENT FOR VALUE THEORY

By

David Daniel McLellan

This study is one of a series of research efforts designed to investigate value theory (Rokeach, 1973) and the experimental induction of value change. This investigation focuses on two separate areas of value theory research: (I) the types of stimulus information provided to induce change and (II) individual differences in the cognitive structure of value systems.

The college student subjects ($n = 300$) who volunteered to participate for course credit attended three sessions. They were pretested on values, racial attitudes, and moral reasoning. Three weeks later, they were randomly assigned to one of four experimental value-change treatments or to a control treatment. Four weeks after the experimental sessions, subjects were posttested on values and racial attitudes.

I. The first aspect of the study was concerned with the importance of three types of stimulus information which are given to the subject in a basic value-change procedure which had proved successful in inducing increases in subjects' rankings of the values equality and freedom. These three types of information are: (1) objective feedback about the subject's own value rankings, (2) objective feedback about the value

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rankings of the subject's peers, and (3) the experimenter's interpretive feedback about the stimulus data designed to make the subject aware of any internal value/self-conception inconsistency.

According to value theory, the induction of value change requires that the subject discover an inconsistency between one of his values and his self-conception. The basic value-change procedure uses the three types of information to make the subject aware of any inconsistency between his self-conception and his value for equality and/or freedom. The potential roles of the three types of feedback in the value-change process were considered and only Type-2 (others' feedback) and Type-3 (interpretive feedback) were thought to be crucial for inducing value change. Type-2 feedback was thought to be important in a process of value validation whereby the subject objectively validates his own internal value preferences with the concrete terminology of the value measuring instrument. Type-3 feedback was thought to be necessary to overcome a subject's defensive efforts to avoid confronting the motivating inconsistency. Type-1 feedback was thought to be unnecessary for inducing change since the subject is subjectively aware of his own internal value preferences.

The four experimental value-change treatments varied in terms of the stimulus information provided to the subject. One treatment provided all three types of information (1+2+3). The remaining three treatments were variations of this basic treatment which were designed to induce value change with only two of the three types of feedback (1+2, 1+3, or 2+3). Comparison of mean posttest target value rankings of the four experimental groups with the control group revealed that the two procedures which did not provide either Type-2 or Type-3 feedback failed to

induce any significant change in either equality or freedom. These results were consistent with the hypothesized roles of each type of feedback in the value-change process. The results also demonstrated the difficulty of creating the appearance of value change by mere suggestion or persuasion.

II. The second aspect of this study was concerned with individual differences in the organization of value systems. At the present, value theory only recognizes that values are organized by the individual into systems hierarchically ordered in terms of value importance. It was hypothesized that values, no less than other cognitive elements, are subject to organizational influences related to the overall development of cognitive processes. Thus, value systems, in addition to differing in the simple rank-ordering of values, should also differ along such dimensions as differentiation, segmentation, unity, homogeneity, and the like.

Using Kohlberg's test of the developmental structure of moral reasoning as a global measure of each subject's cognitive structure, the subjects in the value-change experiment were categorized into one of the three moral levels of the developmental scheme. It was hypothesized correctly that: (a) the most highly developed subjects would have the most stable value systems; (b) value systems would become increasingly more content-similar at each successively higher level of moral reasoning; and (c) the single value equality would predict total racial attitude score significantly better at the highest moral level. The results were seen to have important implications for understanding the valuing process and for predicting attitudes and behavior from values.

III. Although no specific hypotheses were offered, it was suggested

that subjects at a particular moral level might change more or less in response to a particular set of value-change stimuli. Even though the results revealed little significant interaction (Treatment x Moral Level), certain trends were interpreted as suggesting that the structural dimension may have important implications for future value-change research.

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VALUE CHANGE AND THE IMPLICATIONS OF COGNITIVE-
MORAL DEVELOPMENT FOR VALUE THEORY

By

David Daniel McLellan

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To Zita

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I am indebted to the many individuals who have provided assistance during this research effort and I wish to express my deepest gratitude to each of them. Without their contributions, this research might never have been completed.

The many contributions of the members of my committee cannot be adequately catalogued since their influence over the years has extended well beyond their formal committee roles. My association with Dr. Milton Rokeach has been singularly important. His guidance, insights, exhortations and patience have been of incalculable value. I am fortunate to have had the opportunity to work closely with him and to learn from him. Dr. Eugene Jacobson has been equally helpful with his generous guidance in seeing this work through to completion. Dr. William Crano, Dr. Jeanne Gullahorn, and Dr. John McKinney have also made important contributions, both to this work and to my general professional development.

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Dr. Lawrence Kohlberg and his associates at Harvard were generous in their assistance during our visit to Cambridge to uncover the mysteries of the moral judgment interview.

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INTRODUCTION

This research is part of an extended series of experimental investigations into the nature of human values begun by Rokeach (1968). Rokeach has argued that the concept of values should replace the concept of attitudes as the central concept of social psychology and he has supported this argument with research efforts designed to operationalize and to validate the value concept. A major focus of value theory research has been the experimental induction of value change (Rokeach, 1968, 1971, 1973; Rokeach & McLellan, 1972; Rokeach & Cochrane, 1972; Hollen, 1972; Homant, 1970; Waddell, 1972; Conroy, Katkin & Barnette, 1973; Cochrane & Kelly, 1971). Within this line of value-change research, a majority of the experiments have focused on methods for inducing participants to increase their ranking of the values equality and freedom.

The research reported herein is a direct lineal descendant of this previous line of research. However, the reader should note that this work has two separate and distinct foci which emerge from this value theory/value experimentation tradition at quite different points. These two foci are treated separately in Chapters I and II.

In Chapter I, the process of value change is discussed in terms of the three types of information which the experimenter provides for the subjects in the value-change procedure: (1) feedback about subject himself, (2) feedback about the cognitions and behavior of others, and

(3) the experimenter's evaluative interpretation of the observed relationships among certain values, racial attitudes, and behavior.

The importance of the roles which these three types of information play in inducing value changes are examined in this experiment by evaluating the effectiveness of four different experimental procedures. One experimental procedure utilizes all three types of information and the others are variation treatments which utilize only two of three types of information. If one type of information is crucial to the value-change process, the treatment which excludes that type should be ineffective in inducing value change. If one type of information is not crucial to the change process, a treatment should effectively induce value change notwithstanding the fact that the treatment excludes that type of information.

Chapter II proceeds from a conceptually distinct point by examining value theory's view of the structure of value systems as a hierarchy of value importance. We will suggest in Chapter II that there are important individual differences in how people organize their values that are not measured by the value measuring instrument (Appendix B). To measure these structural differences, Kohlberg's (1958) test of cognitive-moral development will be employed and the subjects assembled for the value-change experiment (proposed in Chapter I) will be categorized into groups representing qualitative differences in cognitive organization. We will ask what implications this cognitive-structural variation has for (a) value system stability, (b) for value system content, and (c) for value-attitude linkages.

Only at the end of Chapter II will we come full circle and bring the two foci of Chapters I and II together. At that point, we will

consider the potential implications of cognitive structure for the process of value change. We will ask how the structurally different groups of subjects will respond to the various types of value-change procedures.

The reader should keep in mind that Chapter I deals with methods of inducing value change exclusively and does not acknowledge the possibility that subjects might differ in the ways they cognitively organize their values. Thus, Chapter I and the experimental results reported in the first half of Chapter IV represent an experiment logically independent of any of the discussion related to how people organize their values. Similarly, the bulk of Chapter II and related results are independent of the discussion of value-change methodology in Chapter I. However, because the two independent experiments are run simultaneously on the same subjects and because the ways in which the subjects organize their values have obvious implications for how they will change their values, the two experiments are ultimately considered jointly.

Chapter III will detail the methods of this experiment and Chapter IV will detail the results. The dual focus of Chapters I and II will be maintained in Chapter IV.

Chapter I

EXPERIMENTAL VALUE MODIFICATION

Detailed and exhaustive considerations of various conceptions of values have been presented elsewhere (Dukes, 1965; Hollen, 1967; Homant, 1967; McLellan, 1970; Pittel & Mendelsohn, 1966; Rokeach, 1973) and will therefore not be reviewed again here. Rather, we shall address ourselves specifically to the theory of values proposed by Rokeach (1968, 1973) which serves as the focus of this research.

Rokeach (1973) has argued that the concept of value should replace the concept of attitude as the central concept in social psychology in that values are more central, more dynamic, and more economic cognitive components than attitudes. Additionally, Rokeach conceptualizes attitudes and behaviors as being under the cognitive control of values.

The theoretical assumptions which underlie Rokeach's theory of values are:

- (1) all individuals possess values;
- (2) the number of values a person holds is relatively small;
- (3) values are organized into value systems;
- (4) the antecedents of values are to be found in the individual's social environment and in his personality; and
- (5) the consequences of values are manifested in virtually all social phenomena.

A value is defined as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable

to alternative modes of conduct or end-states of existence [Rokeach, 1968, p. 160]." This concept of value is differentiated from the concept of attitude in that a value is a single belief that transcendentally guides behavior and judgment across specific situations and objects while an attitude is a cluster of beliefs centered on a specific situation or object.

The individual is thought to conceptually organize his value beliefs into value systems along a continuum of relative importance. The two general types of values are organized into two distinct yet functionally interrelated systems, the terminal value system (preferences about end-states of existence) and the instrumental value system (preferences about modes of conduct).

The values of individuals, as measured by the Rokeach value survey (Appendix B), have been shown to correlate with a wide variety of behaviors and attitudes (Rokeach, 1968, 1969a & b, 1973). More importantly, perhaps, Rokeach (1968, 1971, 1973) has demonstrated the possibility of inducing long-term changes in attitudes and behaviors by means of inducing changes in people's values. Where, as a matter of policy, it becomes ethical and desirable to attempt to modify the attitudes or behaviors of individuals, Rokeach (1973) has suggested that inducing change in the underlying values of the individuals may be more successful than attacking the attitudes or behaviors directly. To the extent that behaviors and attitudes are directed by and are consistent with values, attempts to modify the behavior or attitude while leaving the underlying value structure unchanged maximizes the probability that any induced change will dissipate over time as the behavior or attitude returns to a form consistent with the values. Where the underlying value

structure is the target, any changes resulting will inevitably lead to attitudinal and behavioral modifications required to bring these systems into conformity with the new value structure. Rokeach notes the difficulty of inducing long-term attitude or behavioral change by traditional methodologies such as forced compliance or persuasion.

In research efforts to overcome these limitations, Rokeach (1968, 1971, 1973) has experimented with techniques designed to induce changes in participants' values and to thereby induce long-term attitude and behavioral changes. The research reported herein is designed, in part, to extend this line of experimentation. The extension proposed in this chapter focuses on the three basic types of information which the change agent (i.e., the experimenter) provides to the participants whose values he seeks to change. These three types of information are: (1) feedback about the participant's own values, attitudes and behavior; (2) feedback about the values, attitudes and behavior of the participant's peers; and (3) the experimenter's evaluative interpretation of these stimulus materials. For this experiment, four value-change procedures are developed which differ in the types of information provided to the subjects. The basic treatment uses all three types of information. The other three treatments vary from this basic treatment by excluding one of the three types of information. The relative success of each treatment in inducing value changes should provide a more complete picture of the value change process.

Before detailing these procedures, we should examine both the theoretical bases of value modification efforts and the actual procedures used to induce value changes. We shall begin with a fairly exhaustive examination of the most comprehensive value change study to date because

these experimental procedures serve as the model for our own procedures.

The Madison-Briggs Study

The value change experiment which serves as our primary model is the Madison-Briggs study reported by Rokeach (1971, 1973). This study demonstrated the effectiveness of a relatively simple, group-administered procedure for inducing college students to reorganize their own values. In addition to value changes, Rokeach also found long-term changes in attitudes and behaviors related to the induced value changes.

The Basic Value Change Treatment. The experimental subjects in the Madison-Briggs study participated in what will be called the Basic Value Change Treatment. This treatment is specified distinctively in order (1) to identify it as the treatment successfully used in the Madison-Briggs study and other studies and (2) to distinguish it from other treatments which are simply variations of the Basic Value Change Treatment. [Note: the Basic Value Change Treatment outlined below is virtually identical to the Self & Others' Feedback treatment (Appendix F) outlined in Table 2, page 31.]

The sequence of events in the Basic Value Change Treatment used in the Madison-Briggs study was as follows:

1. Each subject individually rank-ordered the 18 terminal values of the Rokeach value survey in order of importance to himself.
2. The subject next rank-ordered the same value terms in the order he thought Michigan State University students would rank them on the average.
3. The subject was shown "Table 1", which contained the composite rank ordering of the 18 values for 298 MSU students. (Thus, "Table 1" represents the reality of what the subjects were asked to predict in step 2).
4. From "Table 1", the experimenter pointed out to the subject that MSU students had, on the average, ranked the value freedom

first in importance and ranked the value equality eleventh. The experimenter interpreted this to mean that "Apparently Michigan State Students value Freedom far more highly than they value Equality. This suggests that MSU students in general are much more interested in their own freedom than they are in freedom for other people [Rokeach, 1973, p. 237]".

5. The subject was then asked to compare his own value rankings (from step 1) to the MSU averages shown in "Table 1".
6. Next, the subject was asked to indicate his sympathy with the civil rights movement on a three-choice scale ("I am sympathetic and involved", "sympathetic but not involved", or "not sympathetic").
7. The subject was then shown "Table 2" which revealed that all MSU students, regardless of their civil rights position, tended to value freedom very highly but that (a) those students against civil rights valued equality very little while (b) those students active in civil rights valued equality even more highly than freedom.
8. The experimenter interpreted "Table 2" to suggest that "This raises the question whether those who are against civil rights are really saying they care a great deal about their own freedom but are indifferent to other people's freedom. Those who are for civil rights are perhaps really saying they not only want freedom for themselves, but for other people too [Rokeach, 1973, p. 238]."
9. The subject then compared his own values (from step 1) with the data in "Table 2".
10. The subject then responded to a number of questions about his reactions to the procedure.
11. The experimental session ended with the subject indicating whether he was "satisfied" or "dissatisfied" with his own ranking of each of the 18 terminal values (from step 1).

This procedure was designed to induce an affective state of self-dissatisfaction in those subjects whose values (or attitudes) contradicted their own conception of themselves. Such self-dissatisfaction is conceptualized (Rokeach, 1973) to be the stimulus for the subject's reorganization of his values and, subsequently, of his attitudes and behavior.

Subjects in the control group of the Madison-Briggs study were

simply asked to rank their own values. No attempt was made to influence them in any way. At intervals of 3 weeks, 3-5 months, and 15-17 months following the treatment session, subjects were posttested on values and attitudes. In addition, certain equality-related behaviors of the subjects were observed outside the experimental setting as long as 21 months after the treatment.

Posttest measures of values generally revealed significant mean increases in the ranked importance of the values freedom and equality for the experimental group. No similar changes were observed in the control group. At the two later posttests, the experimental group evidenced pro-equalitarian changes in racial attitudes greater than those in the control group. Finally, experimental subjects were found to engage in equality-related behavior (e.g., joining the NAACP) significantly more often than the control subjects.

It is clear that not all of the eleven procedural steps of the Basic Value Change Treatment are either implicitly or explicitly necessary to induce value change. If these eleven steps are reduced to the basic types of stimulus information which are presented to the participant, we find three basic types:

- (1) objective feedback about self (i.e., the participant's own values, racial attitude and behavior);
- (2) objective feedback about others (i.e., the values, racial attitudes and behaviors of other MSU students); and
- (3) the experimenter's interpretation of the significance of the observed relationships among the target values, attitudes and behaviors of others.

Previous research (Rokeach & McLellan, 1972, discussed below at

page 23) suggests that type-1 information (i.e., self-feedback) is not necessary to induce change in the values equality and freedom. That is, the value change process is not dependent on the participant being given objective information about his own values, attitudes or behavior. The roles of the other two types of information in the value change process have not yet been experimentally investigated or conceptually considered. This research attempts to examine the necessity of these informational types in the value change process. First, however, we need to examine the process of value reorganization induced by the Basic Value Change Treatment.

The Process of Change¹

How was the Basic Value Change Treatment able to induce the participants to reorder their values? Were they persuaded by the clever experimenter that a high ranking of freedom and equality is socially desirable? Did the participants simply change in the direction of the values of their peers? Did they discover something about themselves which called for a reevaluation of their own values? It is this last possibility which value theory posits as the mechanism leading to value change.

The experimental procedure is thought to induce value changes by implicating the participant's conception of himself in a contradiction

¹The process of value change is conceptually related to other models of cognitive consistency such as balance (Heider, 1958), congruity (Osgood & Tannenbaum, 1955), and dissonance (Festinger, 1957; Brehm & Cohen, 1962). Rokeach (1973, pp. 215-234) discusses both the theoretical and methodological distinctions between his theory of cognitive and behavioral change and related consistency theories.

with his own values. When the subject becomes consciously aware of this contradiction, he experiences an affective state of self-dissatisfaction which precipitates cognitive reorganization.

[V]alues and attitudes were found to undergo long-term change as a result of feedback of information about one's own and others' values and attitudes....These changes did not, however, proceed according to the simple principle of restoring consistency between two inconsistent cognitions or of changing the less important one so that it would become more consistent with the more important one. Rather... values and attitudes changed in a direction of greater consistency with selfconceptions. Thus, subjects who became aware that they possessed an antidemocratic value changed their antidemocratic value, and subjects who became aware that they possessed an antidemocratic attitude changed their antidemocratic attitude....In all instances, the law or principle the subjects seemed to be obeying was to initiate a change or changes in a direction of greater consistency with self-conceptions [Rokeach, 1973, pp. 270-271].

The essential purpose, then, of the Basic Value Change Treatment (or of any value change effort) is to provide the participant with an opportunity to become conscious of his own internal inconsistency. The process of value change,² in its simplest form, is as follows:

- (a) the participant's self-conception dictates certain appropriate value patterns;
- (b) the participant actually holds values in a pattern inconsistent with his self-conception;
- (c) the participant becomes aware of this self-conception/value inconsistency; and
- (d) the participant experiences dissatisfaction and reorganizes his values into a more consistent pattern.

For example, a participant in the Basic Value Change Treatment might have

²The process of attitude change follows the same form (i.e., discovering attitude/self-conception inconsistency). However, our interest hereafter is limited to the process of value change.

a conception of himself as being an "egalitarian." If this self-conception is construed to require a high value for equality and the participant becomes aware that he actually places a low value on equality, then he should experience some dissatisfaction and increase his ranking of equality as a result.

The important inquiry for our purposes involves the role of the experimenter and the information he provides to the participant in this change process. In essence, to induce value change with the Basic Value Change Treatment requires that the experimenter fulfill three responsibilities. The experimenter must:

- (1) correctly assess the participants' self-conceptions;
- (2) provide the participants with appropriate data on the values of others so that the participants are able to validate their own internal value preferences in value terminology; and
- (3) provide the participants with a credible evaluative interpretation of those data so that the participants can consciously confront their own value/self-conception discrepancies.

If the experimenter fails in any of these responsibilities, we would predict that participants would fail to experience the self-dissatisfaction necessary for value change. In the sections which follow, we shall consider each of these tasks in turn to see why each is so important in the value change process.

The Self-conception. Rokeach (1973) identifies a class of beliefs which are more central to the individual than his values. These are the cognitions that an individual has about himself. These cognitions about one's self represent the self-concept which the individual has about himself.

In short, a person's total conception of himself is an organization of all the distinctive cognitions, negative as well as positive, and the affective connotations of these cognitions that would be displayed if a full answer to the question "Who am I?" (Kuhn, 1960) were forthcoming [Rokeach, 1973, pp. 215-216].

The self-conception, as Rokeach discusses it, is a global representation which encompasses a broad spectrum of other, more specific theories such as those of self,³ ego-ideal,⁵ and ego-level.⁶

In spite of the crucial role which the self-conception is thought to play in the value-change process, the theoretical contours of the self-conception are not well defined and, more importantly, value-change research (including this research) has not yet attempted to operationalize the self-conception. Indeed, a major goal which value theory must set for itself is that of articulating the interrelationships between values and the self-conception.

In the Madison-Briggs study Rokeach assumed that the subjects had conceptions of themselves as "democratic," "fairminded," "tolerant," and the like. This general self-conception was presumed because the college student subjects had, for the most part, been socialized to

³"The self concept...may be thought of as an organized configuration of perceptions of the self....It is composed of such elements as the perceptions of one's characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive and negative valence [Rogers, 1951, p. 136]."

⁴"[I]t is necessary to rational conduct that the individual...should become an object to himself [Mead, 1934, p. 138]."

⁵"[T]he ego ideal is defined as 'Those objectives, states of being, or ways of behaving whose attainment the person considers as important to his self-evaluation or self-definition [Van den Daele, 1968, p. 244].'"

⁶"The construct [ego level] is a collage, pasted together bits from many sources, too many to mention [Loevinger, 1966, p. 198]."

accept such self-conceptions. As Rokeach (1973) notes,

In the final analysis, society and its agents have the most say in defining...conceptions that a person has about his own competence and morality....A person learns to evaluate his own performance and those of others for competence and morality by social comparison processes [pp. 228-229].

The standard against which the subject ultimately evaluates himself is some extrinsic, socially determined standard. The primary role of the agent seeking to induce value change is thus to correctly identify this extrinsic standard against which the subjects evaluate themselves. It is assumed that this standard has been internalized by the subjects through the process of socialization and that it will not be responsive to experimental manipulation. For example, the experimenter cannot realistically hope to convince subjects that their self-conceptions are anti-egalitarian when they are actually egalitarian. The social forces which support the standard are not easily overcome and value changes probably can be induced only in directions consistent with this standard.

The lesson for the experimenter is that he must recognize the limitations imposed by the self-conceptions of his target population or risk failure. Whatever power he has to manipulate the values of others is not an arbitrary power and his success will depend in part on his prior ability to read the social forces which have shaped the self-conceptions of his target subjects. It is in this sense that the experimenter's role in the value-change experiment is to articulate society's expectations about the subjects' self-conceptions. He cannot create self-conceptions, he can only illuminate the self-conceptions which the subjects have already internalized.

Although the self-conception is a crucial element in the induction of value change, this experiment does not directly focus on it. Rather,

we continue to assume that the vast majority of subjects will come into the experimental setting with egalitarian, democratic, and fair-minded self-conceptions. The focus of the experiment is on the information provided to the subjects to make them aware of their own value/self-conception inconsistencies. Obviously, for those subjects who have self-conceptions contrary to our assumption, no value change would be expected.

Value Validation. Once the experimenter has correctly identified his subjects' self-conceptions, his task is then to help them discover any disparity between their own values and their self-conceptions. In the Madison-Briggs study, the standard of egalitarianism presumed to reflect the self-conceptions of the subjects has certain value/attitude/behavior implications which the experimenter exploited in the Basic Value Change Treatment. To induce value change, the experimenter had to make the subjects aware that their own values did not meet the form required by their self-conceptions. If the subject is not convinced of his own value deviance, no self-dissatisfaction is likely to occur and thus no value change will occur.

The difficult problem facing the experimenter is that of providing the participants with sufficient credible information about their own actual value preferences. That is, the experimenter describes a "value/self-conception inconsistency" for the participant and the participant can react only if he actually perceives a valid internal value/self-conception inconsistency within his own belief system. The participant essentially faces a problem of "translating" the experimenter's description into a self-recognizable form which illuminates his own internal discrepancy. For example, if the participant is to increase his own

value for equality he must first be convinced that there is some isomorphism between his internalized conception of the value equality and the experimenter's label "equality." If the participant perceives the experimenter's presentation of equality/egalitarian-self-conception discrepancy to be artificial and not representative of his own internal system, the participant is likely to disregard the presentation because it has no meaningful implications for his own values.

The procedure for putting concrete labels on the value concepts involves the value survey instrument (Appendix B). These value labels are, of necessity, very broad and ambiguous terms. When an individual rank-orders these value labels, he is guided only by whatever internalized standards he has available for choosing among the value terms. By using broad, general value labels and by maximizing the use of the participant's own internal choice mechanisms, the participant's confidence in his own value choices is reduced to a minimum.

[I]t is hardly surprising that many respondents report the ranking task to be a very difficult one--one they have little confidence in having completed in a reliable manner and one they are often sure they had completed more or less randomly [Rokeach, 1973, pp. 28-29].

In view of this skepticism, what would account for the motivating dissatisfaction which occurs when the participant discovers that he has ranked the value label "equality" inconsistently with his self-conception? It is certainly less threatening to himself if he simply dismisses the objective evidence as being unrelated to his "true" value preferences. The experimental evidence indicates, however, that many subjects do not dismiss the objective evidence but rather find it very compelling. One possible method for overcoming this skepticism may be conceptualized as a process of value validation in which the participant uses the

objective information about others' values to confirm the validity of his own value preferences within the value terminology.

This process of value validation rests on the social nature of values explicit in value theory. Values, no less than self-conceptions, are acquired in that global process of socialization and they reflect in some relatively direct manner the various social influences relevant to choices of means and ends. Values, insofar as they are conceptualized as social preferences, are outcomes of the socialization process and when an individual's values are questioned, the ultimate standard against which the individual evaluates his own values is an external, social standard. The highest tribunal for both self-definition and for value-definition is finally the community in which values are established and maintained.

When, as in the Basic Value Change Treatment, the participant's values are implicated in specific value terms, the participant must look to some social referent to judge whether or not his own internal value choices are being accurately represented by the value terms. The experimenter, by providing the participant with information about how his peers have ranked the value terms, supplies the participant with an appropriate external validating referent.

This validating process is a dynamic, interactive process whereby the participant makes two virtually simultaneous judgments. First, the participant compares his own subjective familiarity with the group's values to that group's objective ranking of the value terms. If the objective value rankings are consistent with his perception of the group's value preferences, the participant is able to conclude that the value terms do validly reflect internal value choices. Second, if he concludes

that the value terms are valid representations, he is then drawn to the further conclusion, based on his identification with the group, that his own value preferences may be validly represented by the value terms. At the point that the participant accepts the validity of the value terms, he is ready to compare his own value rankings to the requirements of his own self-conception and is prepared to find this objective comparison compelling.

This hypothesized role of feedback of information about others' values is tested in this experiment by exposing subjects to a variation of the Basic Value Change Treatment which utilizes all of the information in that basic treatment except the express references to the actual value rankings of the other MSU students. In the absence of this feedback about others, we would expect that the subjects would fail to experience the requisite self-dissatisfaction. Thus, this variation treatment should not induce value change.

Additionally, it should be made clear that this expectation holds necessarily only in the negative case. That is, where there is no feedback of information about the values of others in the value-change treatment, the subject will be unable to validate his own values and will thereby fail to experience the necessary self-dissatisfaction. At this point, we cannot predict what the minimum feedback requirement might be, either in terms of what group or what values of that group should be fed back. In fact, we could not even say that this feedback about others' values need be correct information. All we can predict is that failure to provide any feedback about others' values will seriously jeopardize the chances of inducing value change.

A corollary of this hypothesized role of feedback about others'

values is that it is not necessary to provide the participant with objective feedback about his own value rankings. The participant's internalized value preferences are available to himself without expressly ranking the value terms and when he manipulates the value terms by estimating the group's values, he becomes aware of his own subjective ranking of the target values equality and freedom. That is, the participant knows if he ranks the target value terms high or low, whether or not he actually ranks them expressly for himself. Thus, when he confronts "Table 1" and "Table 2" he is able to subjectively compare his own values to the objective stimulus data. The important prerequisite for experiencing self-dissatisfaction continues to be overcoming his inherent suspicion of the value terminology and the objective data about others' values fulfills this need even if he has not objectively ranked his own values.

Rokeach & McLellan (1972) tested this corollary by attempting to induce equality and freedom change with a variation of the Basic Value Change Treatment wherein the subjects did not rank their own values. The variation treatment successfully induced target value change and the authors concluded that, indeed, self-value ranking is not important in the induction of value change. For several reasons to be discussed later, this variation treatment will be repeated in this research in an effort to determine whether the Rokeach & McLellan findings can be replicated.

Experimenter's Interpretation. The final essential role which the experimenter fulfills in the Basic Value Change Treatment is that of providing a credible evaluative interpretation of the data which exposes the relationships among the target values, civil rights sympathy and civil

rights activism. The data on MSU students presented in "Table 1" and "Table 2," as we suggested above, are necessary for the value validation process. However, these data also serve to focus the participant's attention on the target values equality and freedom and serve as evidence of the effect of equality ranking on civil rights attitude and civil rights activism.

The experimenter, however, goes beyond merely pointing out the values of interest. He provides an evaluative interpretation of the data in "Table 1" and "Table 2." For "Table 1," the experimenter suggests that the overall low equality and high freedom rankings are evidence of a self-centered philosophy which puts concerns for personal freedoms well above concerns for sharing these freedoms with others. "Table 2" is interpreted to show that pro-civil rights people have an interpersonal concern for the freedoms of all people while those against civil rights are concerned only for their own rights and are indifferent, at best, about the rights of others.

One may ask whether this interpretation of the data is necessary to induce value change or whether it is merely verbiage. This experiment attempts to answer this question by exposing subjects to a variation of the Basic Value Change Treatment which differs from the basic treatment only in that each subject interprets the data for himself instead of the experimenter providing his one interpretation for all. The subject would have to interpret the implications of ranking freedom high and equality low and would have to discover any inconsistency between his own values and self-conceptions in light of these implications. Given the complex nature of the value terms and the assumed defenses of the subject to uncovering internal inconsistency, the probability of the

subject consciously discovering such a potentially threatening contradiction would be significantly reduced by failing to make that contradiction explicit. The experimenter's role is to act as an agent for the society by expressly stating societal expectations about self-conceptions and values. To the degree that the subject's own self-conception is consistent with the stated or implied expectations, there is a smaller chance of ignoring or defending against the discovery of his own inconsistency.

The subject is presumed to have internalized a self-conception of egalitarianism and to have internalized values which reflect that self-conception to a greater or lesser degree. The experimenter, by means of his interpretation of the data, brings these elements to a level of awareness and forces the subject to evaluate himself in light of societal expectations as the subject has internalized them. In essence, by interpreting the data in a manner consistent with the subject's own expectations of himself, the subject is forced to become aware of any latent inconsistencies.

It should be quite clear that the experimenter does not persuade the subject to change his values by interpreting the data in any particular way. Indeed, typical persuasive techniques should be ineffective in inducing any enduring value change. The experimenter provides a catalytic surface on which the subject discovers his own inconsistency. The motive forces which exist to modify values have been built up within the subject over years of socialization and the experimenter simply attempts to trigger these forces by having the subject confront himself. The interpretive explanation by the experimenter in the Madison-Briggs experiment is the final necessary step in this confrontation procedure.

Summary. Our analysis of the Madison-Briggs study has suggested that the experimenter must successfully fulfill three minimum requirements if the effort to induce value change among the participants is to be effective. The experimenter must:

- (1) correctly assess the participants' self-conceptions;
- (2) provide feedback about the values of others so that the participants can validate their own values; and
- (3) provide the appropriate interpretive information to bring the participants into the necessary self-confrontation.

In addition to (2) and (3), the experimenter in the Basic Value Change treatment also provides feedback about the participant's own values. This feedback does not appear to be necessary for inducing value change.

Value Change: Further Studies

Although the Madison-Briggs study was the most comprehensive value change study to date, there are a number of other experiments in this same line of research which we should examine to see if their findings are consistent with our analysis of the basic requirements of a value change treatment presented above.

Value Change Study (Rokeach 1968, 1973). This study was actually preliminary to the Madison-Briggs study but it may most usefully be viewed as incorporating a variation of the Madison-Briggs technique. In essence, the Value Change study differed from the Madison-Briggs study only by the addition of a second experimental treatment which was an abbreviated version of the Basic Value Change Treatment. One experimental group received the Basic Value Change Treatment while the other experimental

group received a similar treatment abbreviated by omitting "Table 2" (which displays the relationships among civil rights attitude and the values equality and freedom).

Subjects in both experimental groups (and in the control group) were posttested 3 weeks and 3 months after the treatment sessions. Both experimental groups significantly increased their ranking of the value equality although the amount of change evidenced by the group which received the abbreviated treatment was somewhat less than that for the group which received the Basic Value Change Treatment. In addition, at the 3-month posttest, the group which received the abbreviated treatment did not evidence any significant changes in attitudes toward blacks or equal rights as did the group which received the full treatment. Indeed, the abbreviated treatment group evidenced less attitude change than the control group.

These findings suggest (1) that the abbreviated treatment was somewhat less effective in inducing value change and (2) the value changes which did occur had considerably less impact on attitudes. By omitting "Table 2" and its related interpretation, the abbreviated treatment was probably less effective in making the subjects consciously aware of their own inconsistencies. These findings are consistent with our analysis which suggests that such an abbreviated treatment would be somewhat less effective due to more subjects failing to become consciously aware of their inconsistencies.

Rokeach & McLellan study. In this experiment (Rokeach & McLellan, 1972), the effectiveness of another modified treatment was compared to the Basic Value Change Treatment. The modified treatment (called the "Others Only Feedback" treatment) differed from the Basic Value Change

Treatment in that subjects did not rank their own values and thus could not objectively compare their own value rankings to the data presented in the treatment. The subjects in this modified treatment were given all the information about how MSU students ranked the values as well as the interpretive information about the relationships among the values equality and freedom and civil rights attitude.

Posttesting on values 4 weeks later indicated that the Basic Value Change Treatment and the modified treatment were equally effective in inducing changes in the importance of equality and freedom. A behavioral posttest 3 months after the treatment sessions indicated that both treatments led to increased behavioral commitment to equality-related actions.

These findings suggest strongly that feedback about one's own values is not crucial to the value change process. This is consistent with the view presented earlier that it is objective information about others' values which is crucial to the change process. The subjects in the modified treatment group were able to infer their own value positions when dealing with the data in "Table 1" and "Table 2". The feedback about others' values was sufficient for these subjects to objectively identify their own value positions. To the degree that they were familiar with values of their peers, the feedback about others' values provided the subjects in the modified treatment with an opportunity to validate both the value data and their own subjective value positions. To the degree the subjects could identify with their peers, the feedback about their peers' values provided the subjects with implied evidence about their own values.

As has been noted, values are ultimately judged by a social standard and the feedback about others' values is a necessary element in the value

change procedure because it provides some portion of that standard for the subjects. The success of the modified treatment shows that the subjects come to the experimental setting with their own internalized values and the experimenter need only provide some minimum extrinsic referent to allow the subjects to orient to the data and to validate their own value positions.

Waddell (1971) adapted the Basic Value Change Treatment for a study in which he attempted to increase the militancy of black college students at a southern university. Waddell first developed a value survey which substituted many of Rokeach's value terms with terms thought to comprise the value hierarchy of militant blacks. Using this modified value survey, Waddell confronted his experimental subjects with data showing that black students who are not oriented to helping black people in the black community ranked the value a world at peace 1st and black value system 15th. Black students oriented to helping blacks were shown to rank a world at peace 16th and black value system 2nd. In the experimental session, the experimenter interpreted these data to mean that "blacks who ranked a world at peace first seem to be saying that they are more concerned about a world at peace than they are about the oppressive conditions under which black people are forced to live. Moreover, they appear to be extremely unrealistic in their idealistic belief that there can be a world at peace before working to eradicate the oppressive conditions that their people are forced to live under day in and day out."

Subjects in both experimental and control groups were subdivided into one of three posttest groups: immediate posttest, 3-week posttest, or 6-week posttest. Both attitudes and values were posttested. At the

immediate posttest, the experimental and control groups differed significantly in their mean ranking of the two target values. However, no value differences attributable to the experimental treatment were evident at the two later posttests. Also, no differences between experimental and control groups on any of four attitudes were evident at any posttest. In essence, the procedure used by Waddell failed to induce any observable, long-term value changes. Those value changes found at the immediate posttest would seem to be an artifact reflecting the demand characteristics of the experiment.

Although Waddell concluded that the failure of his procedure to induce value and attitude change revealed a weakness in value theory, it is possible to interpret his results in a way consistent with the process of value change outlined here. This alternative interpretation, of course, does not necessarily contradict Waddell's own interpretation.

First, although Waddell does not fully reveal his expectations about the self-conceptions of his subjects, it seems that his implicit expectations were that the subjects considered themselves to be pro-black, anti-white, and anti-peace. If, in fact, the subjects were not anti-white and anti-peace then they would not have discovered values necessarily inconsistent with their own self-conceptions and thereby would not be motivated to change.

Second, Waddell reported that his value change manipulation was "identical in kind as that used by Rokeach [in the Madison-Briggs study] [p. 81]." However, Waddell suggested to his subjects that two values (a world at peace and black value system) were incompatible and that a sense of black peoplehood could be achieved only by replacing one with the other. Thus, to accept Waddell's proposal, his subjects would have

had to reject the value a world at peace. In contrast, the subjects in the Madison-Briggs study were not forced to choose between freedom and equality. Rather, they were asked to consider equality as being as important as freedom.

These two factors suggest that Waddell's innovative procedure to increase black value system was confounded by a simultaneous effort to get the subjects to abandon a value of great importance; a change which may not have served to enhance or protect their self-conceptions. With such conflicting pressures in the experimental setting, value theory would predict that the subjects would tend to reject the entire stimulus message.

Hollen (1972) attempted to induce value change with a persuasive message. Experimental subjects in his study were given a short excerpt of a speech by a well known social psychologist in which the source attempted to persuade the subjects of the importance of the value a world of beauty. In the message, the source notes the low ranking of a world of beauty in the general population and briefly gives reasons why the value should be considered more important. The source also notes that young, better educated people tend to rank a world of beauty higher than the general public.

An immediate posttest revealed significant value and attitude changes in the predicted direction. A posttest one month later on a non-random subsample revealed that the value and attitude changes had persisted. Additionally, Hollen reported a strong relationship between changes in particular attitudes and the perceived instrumentality of the attitudes.

Hollen did not address himself to the process of value change other

than to suggest that the persuasive message influenced the subjects to increase their ranking of a world of beauty. However, analysis of Hollen's procedure suggests that the essential elements found in the Basic Value Change Treatment were also present in his treatment. First, Hollen probably correctly perceived that his college-student subjects had conceptions of themselves as ecology-minded. Second, Hollen's "persuasive" message notes the relative importance of the target value a world of beauty for the general population and for the subjects' peers. In this way, the subjects were able to validate the general value concept under discussion as well as their own value position. Finally, the "persuasive" message was designed to make the subjects aware of the gap between their own self-conceptions and their value for a world of beauty. Thus, Hollen's treatment, rather than "persuading" the subjects, provided the conditions under which the subjects could examine their own beliefs and could experience self-dissatisfaction.

Rokeach & Cochrane (1972) compared the effectiveness of the Basic Value Change Treatment given in the usual anonymous classroom-group conditions with the same treatment given in an intimate, individual face-to-face setting. The nonprivacy condition yielded as much value change as found in the anonymous condition, suggesting that the face-to-face procedure did not make the subject more defensive and did not inhibit change.

Hypothesis - Part I

The Basic Value Change Treatment has shown itself to be an effective method for inducing value change in the studies cited above. Thus, we are reasonably confident that value change can be induced by providing

participants with the three basic types of information found in that treatment: (1) feedback about self, (2) feedback about others, and (3) the experimenter's interpretation. Using a variant of the Basic Value Change Treatment where subjects were presented with types 2 and 3 but not type 1, Rokeach & McLellan (1972) found that similar value changes could still be induced. This research attempts to replicate that finding and also continues further in this line by attempting to induce value change with two other treatments, one of which provides only types 1 and 3 and not type 2 and the other of which provides only types 1 and 2 and not type 3. Our analysis suggests that attempting to induce value change without type 2 (others' feedback) or type 3 (interpretation) will be unsuccessful. This, then is the general hypothesis we wish to test.

Toward this goal, college student subjects were randomly assigned to participate in one of five different experimental treatment sessions. By recalling these subjects four weeks later and asking them to again rank their values, we should be able to determine which of the treatments had successfully induced value reorganization. Table 1 outlines the types of information which are and are not present in each of the five treatments. The precise procedural steps in each treatment are outlined in Table 2.

1. The Self & Others' Feedback (SOF) treatment is identical to the Basic Value Change Treatment used in the Madison-Briggs study detailed above. Why repeat this often-used treatment again? The reasons are two-fold. First, even though this treatment has been successfully used in earlier experiments, the social climate or the values of the subject population may have changed

TABLE 1. Types of stimulus information presented in each treatment.

	^a Self & Others' Feedback (SOF)	SOF/NO Interp- retation (SOF/N)	Self Feedback (SF)	^b Others' Feedback (OF)	Control
1. Objective feedback about SELF	YES	YES	YES	-	(c)
2. Objective feedback about OTHERS	YES	YES	-	YES	(c)
3. Experimenter's interpretation	YES	-	YES	YES	-

Note.-- All three types of information emphasize the values equality and freedom and civil rights sympathy.

^a Identical to the Basic Value Change Treatment used by Rokeach (1973).

^b Identical to the modified treatment used by Rokeach & McLellan (1972).

^c Control subjects rank their own values and are shown average MSU value rankings but no particular values are emphasized.

TABLE 2. Sequence of procedures at each treatment session.

Self & Others' Feedback (SOF)	SOF/No Interp- retation (SOF/N)	Self Feedback (SF)	Others' Feedback (OF)	Control
1. <u>Ss</u> rank own terminal values.	1	1		1
2. <u>Ss</u> estimate ave. MSU values.	2		1	2
3. <u>Ss</u> see "Table 1" (actual MSU ave. values).	3		2	(e)
4. <u>E</u> interprets <u>equality</u> and <u>freedom</u> rankings.	4 ^a	2 ^b	3	
5. <u>Ss</u> compare own values to "Table 1."	5			
6. <u>Ss</u> indicate civil rights sympathy.	6	3		
7. <u>Ss</u> see "Table 2" (<u>equality-freedom</u> x civil rights).	7	4 ^c	4	
8. <u>E</u> interprets "Table 2."	8 ^a	5	5	
9. <u>Ss</u> compare own values to "Table 2."	9	6		
10. <u>Ss</u> respond to questions about treatment.	10	7	6 ^d	
11. <u>Ss</u> indicate satisfaction with own values.	11	8		

^a SOF/N subjects interpret "Table 1" and "Table 2" for themselves in writing.

^b Experimenter interprets with regard to each subject's own values only.

^c "Table 2" is modified to show expected rather than actual data.

^d OF posttreatment questionnaire is abbreviated.

^e Control subjects complete neutral "Moral values" questionnaire and are then shown "Table 1." No interpretation is offered or solicited.

significantly by the time of this experiment. Thus, any effort to induce changes in the value equality may be unsuccessful. By again using the Basic Value Change Technique we should be able to detect any such changes. Second, our major interest in using variations of Basic Value Change Technique is to compare the effectiveness of each variation with the established effectiveness of the Basic Value Change Technique. Thus, the Self & Others' Feedback treatment (which is virtually identical to the Basic Value Change Technique) serves as a baseline experimental treatment. This function of the SOF treatment is complimentary to the function of the Control Treatment (discussed below at # 5): the SOF treatment is predicted to induce the most change in the target values while the Control treatment is predicted to induce the least change.

2. The Self & Others' Feedback/No Interpretation (SOF/N) treatment provides the subject with (a) objective feedback about his own values and (b) the values of other MSU students. As in the SOF parent treatment, the experimenter in the SOF/N treatment explicitly points out the values equality and freedom and their relationship with civil rights. The basic difference is that the SOF/N subject is asked to provide his own interpretation of data rather than having the experimenter provide this interpretation for him. The effectiveness of this treatment should tell us whether or not the subject is able or willing to make the potentially threatening interpretation necessary to induce self-dissatisfaction and value change.
3. The Self Feedback (SF) treatment attempts to induce change without providing any objective feedback about the values of other

people. The SF subject has only (a) his own values and (b) the interpretive feedback of the experimenter with which to discover his own inconsistencies. As nearly as possible, the SF treatment attempts to parallel the SOF treatment but without using the actual data on other MSU students. Rather, the SF subject is asked to use only his own values and attitudes as data. The relative effectiveness of this treatment should reveal the necessity of providing the subject with objective feedback about the values of others.

4. The Others' Feedback (OF) treatment presents subjects with (a) feedback about others' values and (b) the same interpretive information as in the SOF treatment. However, the OF subjects do not rank their own values or make any objective comparisons between their own values or the values of other MSU students.

This treatment is identical to the modified treatment found to be effective by Rokeach & McLellan (1972). However, in that study, the success of the modified treatment was inferred by comparing the OF group's posttest mean value rankings to the posttest rankings of the group which received the Basic Value Change Treatment. There was no control group with which to measure naturally occurring value changes during the experimental period. Additionally, since the OF subjects did not rank their own values at the treatment session, Rokeach & McLellan could not directly determine pretest-to-posttest value change for the modified treatment group. In this replication, these methodological problems are overcome by both including a control group and by providing an additional pretest session three weeks prior to the treatment session where the OF subjects will rank their own values.

5. The Control treatment represents an effort not to induce any specific value change. Control subjects are treated the same as all other subjects with regard to call-backs but are given an essentially neutral task at the treatment session. The Control subjects do rank their own values and are shown the MSU average value rankings but specific values are not emphasized.

The four experimental treatments are all designed to induce participants to increase their rankings of the target values equality and freedom. The Self & Others' Feedback treatment (i.e., the Basic Value Change Treatment) should, of course, again demonstrate itself to be an effective change-inducing procedure. The Others' Feedback variation, too, should again demonstrate its effectiveness. In contrast, our discussion of the process of value change has suggested that the two remaining variation treatments fail to provide their subjects with some information (either feedback about others' values or the experimenter's interpretation) which is necessary for inducing self-dissatisfaction. If our discussion is correct, neither the SF nor SOF/N treatments will induce value change. Thus, the following hypotheses (stated in terms of our actual expectations) are proposed:

HYPOTHESIS 1: Of the four value change treatment groups, only the Self & Others' Feedback (SOF) and the Others' Feedback (OF) groups will rank equality significantly higher than the Control group at the posttest.

HYPOTHESIS 2: Of the four value-change treatment groups, only the SOF and the OF groups will rank

freedom significantly higher than the Control group at the posttest.

Design and Analysis. The experimental design (see Table 3) is basically a variant of the randomized pretest-posttest design (Campbell & Stanley, 1963). Subjects are pretested on the dependent variables equality and freedom three weeks prior to the experimental treatments and again (except the Others' Feedback group) as part of the experimental procedures. Posttesting occurs four weeks after the treatment sessions. The differential effects of the value-change treatments will be determined by comparing mean posttest target value rankings adjusted by covariance analysis where the covariate is initial value ranking nearest the treatment (Cronbach & Furby, 1970; Winer, 1971).⁷

It is obvious that each of the stated hypotheses actually represents a series of four implicit subhypotheses, each of which predicts for one of the experimental treatments.⁸ Thus, hypotheses 1 and 2 can be "confirmed" only when all four experimental treatments yield results consistent with our expectations derived from the analysis of the value

⁷See Rokeach (1973) for a discussion of the ipsative nature of the data generated by the value survey. See Nunnally (1967) for a general discussion of the relationships between scaling and mathematical analyses.

⁸The four null subhypotheses implicit in hypothesis 1 (and hypothesis 2) are: (1) SOF $\leq$ control, (2) OF $\leq$ control, (3) SF $\leq$ control, (4) SOF/N $\leq$ control, where the dependent variable is the adjusted mean posttest equality (or freedom) ranking for each group. The alternative subhypotheses are: (1A) SOF $>$ control, (2A) OF $>$ control, (3A) SF $>$ control, (4A) SOF/N $>$ control. Each of the null subhypotheses is tested individually. Each hypothesis stated in the text expresses our overall expectation that subhypotheses (1) and (2) will be rejected in favor of alternatives (1A) and (2A) while subhypotheses (3) and (4) will not be rejected. That is, the stated hypotheses will be "confirmed" only when the four statistical decisions for the four implicit subhypotheses take the form: (1A), (2A), (3), (4).

TABLE 3. Outline of experiment.

PRETEST SESSION (week 0)

All subjects complete the following:

1. Rokeach value survey (form D).
2. Multifactor racial attitude inventory (2-choice format).
3. Kohlberg moral judgment interview.

TREATMENT SESSION (week 3)

Subjects are randomly assigned to one of the following treatment groups (see Table 2 for detail):

1. Self & Others' Feedback (SOF).
2. Self & Others' Feedback/No Interpretation (SOF/N).
3. Self Feedback (SF).
4. Others' Feedback (OF).
5. Control.

POSTTEST SESSION (week 7)

All subjects complete the following:

1. Rokeach value survey (form D).
 2. Value importance scale.
 3. Multifactor racial attitude inventory (8-choice format).
-

change process. If any one treatment fails to meet our expectations it brings into question not only our analysis of the role of that specific type of feedback but also the entire analysis of the value change process since the feedback types have functionally interdependent roles.

Attitude Change

The previous research has shown that racial attitudes as well as the values equality and freedom undergo change as a result of the value-change treatments. However, Rokeach (1973) reports that racial-attitude change in the direction of the equality change may not be observable in the first few weeks following the treatment. In the Madison-Briggs study, a "sleeper" effect was apparent in that pro-egalitarian attitude changes were not observed at the three-week posttest but did appear in the three-month and fifteen-month posttests. For this reason, we do not expect any significant differential racial attitude changes to appear by the time of our four-week posttest and no hypothesis concerning racial attitude change will be offered. However, we shall report on racial attitude change briefly in the results.

Chapter II

VALUES AND MORAL DEVELOPMENT

Before going on to the method and results chapters which will complete the experiment described in Chapter I, we are going to take a substantial detour in this chapter to pursue a new line of inquiry: individual differences in the structural organization of value systems. The discussion in Chapter I recognized individual differences among the participants in value content. This chapter adds the dimension of developmental differences in the form of value system organization. In addition, we will take advantage of the experiment in Chapter I to test some new hypotheses about value system structure.

This chapter is included as an effort to begin developing one of the least well-developed areas of value theory: the cognitive structure of value systems. Value theory (Rokeach, 1973) does not yet offer a complete picture of how people assimilate and integrate the individual values into a system or systems. The only organizational principle yet recognized by value theory is found in the definition of a value system as "an enduring organization of values along a continuum of relative importance [Rokeach, 1973, p. 5]." This principle is recognized in the value measuring instrument (Appendix B) which asks the respondent to rank-order the value terms "in order of importance to YOU, as guiding principles in YOUR life."

Needless to say, value theory does not hold that the simple

hierarchy of the value survey instrument is an isomorphic representation of the respondent's internalized value system. However, neither does value theory offer a compelling alternative conceptualization of value systems beyond the hierarchical principle. This chapter will take one step in the direction of developing a compatible alternative which may provide further insights into how people organize and use their values. What we will do is use Kohlberg's (1958) measure of cognitive-moral development to categorize the subjects from the Chapter I experiment into levels representing qualitative differences in cognitive organization. Then we will hypothesize that the value systems of subjects at these various developmental levels will exhibit certain predictable differences in (a) stability, (b) value content, and (c) value-attitude linkages. Additionally, since these developmental levels also represent differences in the functional roles that values fulfill for the individual, we will speculate on their potential effects on the process of value change induced by the experimental value-change procedures.

However, before offering these additional hypotheses, some further illumination of the problem and a more complete consideration of moral development theory's potential application to the problem are in order. Of course, the reader who is well acquainted with both value theory and moral development theory may wish to advance directly to the hypotheses (page 55).

Value Organization. Value theory recognizes that value systems may be highly individualized:

After a value is learned it becomes integrated somehow into an organized system of values wherein each value is ordered in priority with respect to other values. Such a relative conception of values enables us to define change as a reordering of priorities and, at the same time, to see the

total value system as relatively stable over time. It is stable enough to reflect the fact of sameness and continuity of a unique personality socialized within a given culture and society, yet unstable enough to permit rearrangements of value priorities as a result of changes in culture, society, and personal experience.

Variations in personal, societal, and cultural experience will not only generate individual differences in value systems but also individual differences in their stability. Both kinds of individual differences can reasonably be expected as a result of differences in such variables as institutional values, identification with sex roles, political identification, and religious upbringing [Rokeach, 1973, p. 11].

These individual differences in value systems may have important implications for how an individual uses his own values. For example, an individual may have established subsets of values within his general value system which operate in some social settings and not in others.

Indeed, one of the most interesting properties that values seem to have is that they can be employed with such extraordinary versatility in everyday life. They may be shared or not shared and thus employed as single or double (or even triple) standards. They may be intended to apply equally to oneself and to others, to oneself but not to others, or to others more than to oneself. We know very little indeed about the conditions under which values might be so diversely employed. We may speculate, for example, that competitive conditions will encourage the employment of values as double standards, whereas cooperation will encourage their employment as single standards [Rokeach, 1973, pp. 10-11].

Rokeach also notes that one's value system is never fully activated in any given situation:

It is a mental structure that is more comprehensive than that portion of it that a given situation may activate. It is a generalized plan that can perhaps best be likened to a map or architect's blueprint. Only that part of the map or blueprint that is immediately relevant is consulted and the rest is ignored for the moment. Different subsets of the map or blueprint are activated in different social situations [Rokeach, 1973, p. 14].

The challenge to the theory of values brought on by this complexity of value systems is to explain differential value usage and subset

formation while retaining the conceptual distinctions between values and other less central cognitive components. For example, a conceptualization of a value subset being activated by a specific situation or object suggests nothing so much as the definition of an attitude (i.e., an organization of beliefs around a specific object or situation). The confusion is greater if we conceptualize values which change relative positions in response to situational cues. If honest is very important to me at home but not important at work, it is difficult to conceptualize honest as a "transcendental, enduring belief that honest is a desirable mode of behavior." Honest is desirable at home, not at work, and thus honest has lost some of its distinctive "value" character. If we wish to retain the notion of a value as a generalized and universally applicable belief which transcends specific situations while also recognizing the reality of "situation-specific values," then we must find a compatible mechanism responsible for the differential value usage.

Cognitive Organization. Since a value is a single belief organized into a more complex system of values, it seems logical to focus on the generalized principles and rules by which cognitive organization takes place. That is, a value system is simply one of many component subsets of cognitive elements within the total cognitive system. Although value theory's reliance on subjective value importance as the primary principle of value organization is desirable for its parsimony, more inclusive cognitive theories dealing with the organization of cognitive components suggest a more complex state of affairs.

Such structural theories generally consider both the individual cognitive components such as attributes (Zajonc, 1968) as well as the

principles or rules for organizing the components into meaningful relationships which allow the individual to deal effectively with his environment. Generally, cognitive organizations are described in terms of the complexity of the system and the degrees of integration and differentiation of the cognitive components.⁹

Since values are thought to be near the core of the individual's total cognitive system, there seems to be little logical justification for considering values to be immune from those organizing influences which affect other cognitive components. Indeed, if values are as influential on less central cognitive components as value theory suggests, these organizing influences may even originate within the value system. In any event, organizational influences other than the hierarchy principle would be expected to have some impact on value organization. In general, we are suggesting (a) that observed differences in cognitive systems will be reflected in correlated differences among value systems and (b) that these structural differences will have important implications for value functioning.

We will test these suggestions by distinguishing among the subjects in our experiment on the basis of the structural characteristics of their cognitive systems and by then observing the related value system differences. Kohlberg's (1958) test of developmental levels of moral reasoning was selected to measure these cognitive-system differences because of the important theoretical overlap between

⁹ Zajonc (1968) sees cognitive structure varying along the following dimensions: differentiation, complexity, unity, degree of organization, homogeneity, segmentation, and valence. Scott (1963) refers to differentiation, relatedness, and integration of cognitive structures. Harvey, Hunt & Schroder (1961) deal primarily with the concrete-abstract dimension of cognitive organizations. Rokeach (1960), in his earlier work on dogmatism, discusses the nature of belief systems in such terms as isolation, differentiation, comprehensiveness, and so forth.

moral development theory and value theory and because of our previous experience with the test. In the following section moral development theory is examined in more detail.

Theory of Moral Development. Kohlberg's (1958) cognitive-developmental theory deals explicitly with cognitive structure related to socio-moral reasoning ability. The basic assumptions of the theory are shared with other moral theories, such as those of Dewey & Tufts (1932), Mead (1943), and Piaget (1932):

All have postulated (a) stages of moral development representing (b) cognitive-structural transformations in conception of self and society. All have assumed (c) that these stages represent successive modes of "taking the role of others" in social situations, and hence that (d) the social-environmental determinants of the development are its opportunities for role taking. More generally, all have assumed (e) an active child who structures his perceived environment, and hence, have assumed (f) that moral stages and their development represent the interaction of the child's structuring tendencies and the structural features of the environment, leading to (g) successive forms of equilibrium in interaction. This equilibrium is conceived as (h) a level of justice, with (i) change being caused by disequilibrium, where (j) some optimal level of match or discrepancy is necessary for change between the child and the environment [Kohlberg, 1971, pp. 183-184].

Kohlberg's (1958, 1963, 1971) theory postulates an invariant, universal sequence of six stages of moral development (Table 4). Each stage in the sequence of moral development represents an "ideal-type" normative ethical theory. Each stage description represents the fundamental cognitive-moral structures which the individual achieves and then reorganizes in the course of development through the sequence. Turiel (1969) reports that about fifty per cent of a subject's reasoning will be at his dominant stage. The remaining fifty per cent of reasoning will be distributed at stages both below and above the dominant stage in

TABLE 4. Brief definition of moral levels and stages.

Level I. PRECONVENTIONAL

The individual is responsive to cultural labels of right or wrong but interprets them in terms of either the physical or hedonistic consequences of actions (reward, exchange for favors), or in terms of the physical power of the rule maker. The two stages of level I are:

Stage 1: Punishment/obedience orientation. Acts are judged according to their physical consequences. Avoidance of punishment and ego-centric deference to authority are valued in their own right, not in terms of respect for the underlying moral order (stage 4).

Stage 2: Naive instrumental relativism. Right action is that which satisfies one's own needs and only occasionally the needs of others. Human relations are viewed in terms like those of the market place.

Level II. CONVENTIONAL

Right action consists of performing roles which meet the expectations of one's family, group, or nation. The individual strongly supports the existing social order and strongly identifies with some persons or group within that order. The two stages of level II are:

Stage 3: "Good boy-nice girl" orientation. Good behavior is that which pleases others and is approved by them. There is conformity to stereotypical images of majority or "natural" role behavior. Behavior is often judged by intention (e.g., "He means well.").

Stage 4: Rigid rule orientation. There is orientation towards authority, fixed rules, and maintenance of the social order. Right action consists of doing one's duty, respecting authority, and maintaining the given social order for its own sake.

Level III. POSTCONVENTIONAL, AUTONOMOUS, OR PRINCIPLED

There is an effort to define moral principles which are valid and applicable apart from the power of those holding such principles and apart from the individual's own identification with these groups. The two stages of level III are:

Stage 5: Social-contract, legalistic orientation. Right action is defined in terms of democratically agreed-upon standards and in terms of general individual rights. Awareness of the relativism of personal values. Recognition of free agreement and contract as the binding element of obligation.

Stage 6: 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 basically based on concepts of justice, of reciprocity and equality of human rights, and of respect for the dignity of human beings as individual persons.

a decreasing fashion. Thus, the characteristic mode of functioning appears to be that of a mixture of stage-typical reasoning with dominance at one stage. This mixture is thought to be the result of both imprecision in the measuring procedures and, more importantly, the process of development itself. As Turiel (1969) notes:

Such usage of various stages does not contradict the idea that development is to be described in terms of stages that meet the structured whole criterion. Stages are structured wholes not so much because they reflect a unitary form of individual functioning but because they refer to qualitatively different forms of thought. Consequently, the stages define "ideal types" which are representative of forms of thought rather than people [p. 115].

In answering his own question about the interpretation and definition of moral maturity, Kohlberg (1964) suggests:

One general answer is that a more mature judgment is a more moral judgment. This does not mean that a child who mutters mature judgment is a more moral person, as judged by the standards of the community. It means that his judgments more closely correspond to genuine moral judgments as these have been defined by philosophers.

While philosophers have been unable to agree upon any ultimate principle of the good which would define "correct" moral judgments, most philosophers agree upon the characteristics which make a judgment a genuine moral judgment....Unlike judgments of prudence or esthetics, moral judgments tend to be universal, inclusive, consistent, and to be grounded on objective, impersonal, or ideal grounds [p. 405].

In this way, the "goal" of moral development may be structurally delineated and the progress of any individual may be viewed relative to this goal.

A number of studies have been conducted to provide evidence for the invariant, universal sequence of stages. Kohlberg (1958, 1963a, 1963b, 1964) reports evidence from both longitudinal and cross-sectional studies which validate the occurrence of regular age-related changes in moral reasoning from lower stages to higher stages. Turiel (1966, 1969)

provides experimental evidence that the movement from one stage to the next involves a restructuring and displacement of the preceding stage. Kohlberg (1963b, 1968) and Turiel (1969) also present evidence of the cultural universality of the stages of moral development by showing that children in a Malaysian aboriginal village and in Turkish, Mexican, and American villages all follow the prescribed stage sequence.

One important aspect of these stages is the relationship of internalization to the cognitive development of moral concepts. At the first two stages (level I), standards of judgments and motivations are external to the actor. The motivations are essentially rewards and punishments. At the middle stages (level II), the standards are, for the most part, external. However, the actor has internalized much of his motivation to conform where he feels it necessary to maintain the expectations of the family, group, or nation. At the highest stages (level III), the motivations and standards have become internal and it is here that the individual becomes truly "moral."

These formal, structural properties of the judgment process (as conceptualized by Kohlberg) may be viewed as (1) descriptions of the cognitive system in which values are embedded and organized and as (2) primary determinants of some value usage for the individual. Thus, while the process of moral development holds considerable interest, the most important aspect of the theory, for our purposes, involves the adult outcome of the process. It is most important to note that development through the stages is stopped at some point. The termination of moral development is a function of some organismic variables, or environmental variables, or a combination of both types. If the individual's cognitive abilities fail to develop to a point capable of handling

information required by a higher stage of moral development, then moral development will stop. In this sense, the individual's intellectual abilities are a prerequisite for moral development. Although intellectual abilities are a necessary condition for achieving a given stage, they are not a sufficient condition. The environment must provide sufficient stimulus if the individual is to continue developing. If the demands of the environment are insufficient to require the individual to restructure his thought processes to deal more effectively with his environment, then moral development will stop.

Our interest in the development stages is limited in this work to what moral development theory can tell us about the structural characteristics of the individual's reasoning process at a given point in time. The process of change per se will not be considered here. (Note: the reader should keep in mind that Kohlberg's developmental sequence is divisible into six stages (1-6). These stages may also be consolidated so that each two-stage step forms one of three levels (I-III). This research ultimately discriminates among subjects on the basis of their level of moral reasoning.)

Value Systems and Moral Reasoning.

If we now return to the initial problem, what can the stages of cognitive-moral development contribute to our understanding of how people organize and use values? It is likely that a person's stage or level of moral reasoning provides some essential information about the principles by which he organizes and uses his values. Value systems may be conceptualized as organizations of values differing in terms of differentiation, integration, consistency, universality, and the like as

well as differing along a continuum of relative importance. On the basis of these organizational "rules" which each individual uses to structure his values, one may easily make differential predictions about how values are used. For example, an individual whose cognitive structure is relatively concrete, undifferentiated, and rigid would be expected to have a value system in which the values are relatively independent and unconnected both to other values and to a wide range of attitudes. Hence, particular discreet values would be thought to control particular discreet attitudes, opinions, and behaviors. This type of individual would be expected to exhibit considerable variance in value usage since the values are more directly linked to situational variables. This individual may have a compartmentalized subset of values (and related attitudes and behaviors) applicable for his work situation and another subset for his family situation. In both instances, the individual's behavior and attitudes are consistent with his values. It is the values themselves which are different (in content, importance, or both) in each situation.

At the other extreme is the individual with a highly differentiated, integrated and related cognitive structure. His value system would be expected to exhibit these characteristics and the values would exhibit a great degree of interconnectedness both among themselves and with the rest of the belief system. The values would reflect a hierarchy of self-chosen principles which appeal to logical comprehensiveness and to universality. Hence a value would tend to maintain its relative position in the hierarchy regardless of situational variation. All less central beliefs would be organized around these central principles and the high degree of integration would result in fewer inconsistencies. Prediction

of behaviors or attitudes would be markedly easier since the values are operating as a single unifying system for the individual.

More specifically, what are the expected relationships between values as conceived by Rokeach and cognitive-moral structure as conceived by Kohlberg? The developmental stages of moral reasoning may be thought (a) to represent the interactive system within which values are organized and (b) to represent certain rules by which the individual applies value terms. Essentially, values are content and moral development stages are differential operations performed on this content.

As noted above, development of moral reasoning is based on natural transformations of moral thought which reflect underlying cognitive structure. It is the formal, structural characteristics with which moral development deals. This formal structure of judgments of right or wrong is contrasted to traditional formulations which deal with growth of moral knowledge or increased behavioral or verbal conformity to social norms (e.g., Hartshorn & May, 1928).

The "goal" of moral development is a concept of justice:

Justice is not a rule or a set of rules, it is a moral principle. By moral principle we mean a mode of choosing which is universal, a rule of choosing which we want all people to adopt always in all situations....There are exceptions to rules, then, but no exception to principles. A moral obligation is an obligation to respect the right or claim of another person. A moral principle is a principle for resolving competing claims, you versus me, you versus a third person. There is only one principled basis for resolving claims: justice or equality. Treat every man's claim impartially regardless of the man. A moral principle is not only a rule of action but a reason for action. As a reason for action, justice is called respect for persons [Kohlberg, 1970, pp. 69-70].

Since our value change experiment (Chapter I) concerns itself with the values equality and freedom, it may be useful to examine the development of these concepts through the stages of moral development.

Level I: Preconventional. Concepts of personal freedom or equality are external labels or rules and dependent on external interpretation.

Stage 1: Punishment-obedience orientation. Freedom is interpreted in terms of what is allowed by the authority. There is no sense of inherent personal freedom nor of inherent equality of men. People are labeled good or bad on the basis of their power or money, and the intrinsic worth of human life is not differentiated from the power or prestige of its possessor.

Exchange between people is simply a function of relative power and thus unequal, non-reciprocal relationships are expected.

Stage 2: Naive egoistic relativism. Both concepts of freedom and equality appear in their simplest, most absolute forms of this stage. Essentially, the relativistic, instrumental desires of the individual are paramount, yet the stage-2 individual recognizes the need for consideration of others' needs. However, reciprocity is based on a tit-for-tat exchange where there is instrumental anticipation of the reciprocal action. Where his own instrumental wishes are not involved, he is able to consider the instrumental wishes of others. At this point, equality is essentially absolute and negative in orientation: everyone should get the same; no one should have special privileges.

Level II: Conventional. Here, the concepts of freedom and equality are internalized yet depend on external definitions by a social group for their meaning. Essentially, the concepts reflect the stereotyped desires of the family or nation with which the individual identifies himself. Indeed, the individual's concept of self (and hence his value) is inexorably rooted in the social group. Moral development research suggests

that the majority of adult Americans function at the two stages of this level.

Stage 3: "Good-boy-nice-girl" orientation. Freedom at this stage is conceived within the limitations established by a benevolent power authority. The orientation is primarily one of conformity to socially-defined "good" or "nice" behaviors. Equality is the end of resolving the conflict to the satisfaction of both parties. Human life derives its importance from the affection and empathy of others toward it. Conventional unequal relationships may be rationalized in order to maintain approval of others or in grateful return for past favors.

Stage 4: Rigid rule orientation. Again, the concepts of freedom and equality are dependent on social definitions and expectations. Freedom is that which is allowed within the fixed legal or social norms. Equality is essentially a conception that all are required to conform to the same rules. Human life is sacred because of its place in a categorical moral or religious order. However, there is strong feeling of the inherent inequality of individuals based on differences in abilities and merit.

Level III: Postconventional or Autonomous. Here, the concepts of freedom and equality have been internalized in the sense that they are values which are self-chosen and have validity and application apart from the individual's group. It is at these stages that values conform most nearly to the theoretical definition proposed by Rokeach. Additionally, the concept of equality at these stages becomes the primary moral principle.

Stage 5: Legalistic, contractual orientation. Freedom is conceived

to be a primary value yet is not absolute. Personal freedoms are restricted by contractual obligations, including generalized social contracts. There is an emphasis on free choice and establishment of a personal hierarchy of values. Social responsibility is limited to respecting the rights of others and fulfilling contractual obligations.

Equality is conceived of in terms of equality of opportunity and of fundamental human rights which derive from a value of human life which is a basic universal, natural right and a basic object of rational value.

Stage 6: Universal ethical principle orientation. This stage represents a fundamental orientation to the concept of equality. Values are self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency and are based on the principles of justice, equality, and respect. The freedom of the individual is a function of his universal moral principles of decision.

If values are thought to operate within the cognitive system suggested by Kohlberg's stages, a number of implications become evident. Only the values of level III individuals can be differentiated and integrated enough to be considered within one general value system. It is at this level that values truly become transcendental, universal preferences of means and ends. It is at this level that values are applied equally to oneself and to others; where values function apart from situation-or-object-specific variables; where values are relatively stable since they are self-chosen and more independent of cultural variation.

What of the values of the level II individual? It is true that his values are functionally equivalent to the values of the level III individual. However, their structure and relationship to external events are quite different. Structurally, these values are less well integrated and consequently are not universally applied. Values are fundamentally prescribed by the social environment and the level II individual incorporates these values as his own through his identification with some aspect of his social environment (e.g., family or nation). Although he has internalized the value content as fully as the level III individual and these values serve the same essential functions as for the level III individual, the motivation for maintaining the value choices at level II remains rooted in identification process. The important distinctions between values at the two levels are related (a) to the interrelations of the values with themselves and less central cognitive elements, (b) to functional implications based on this difference in integration, and (c) to implications for value change related to the locus of primary support for value choice (i.e., external v. internal).

As Kohlberg notes, the morality of level II individuals is inherently contradictory and the values are no less susceptible to these contradictions. These contradictions are due in part to the lack of integration in the value system. Values tend to cluster into discrete units and thereby generate contradictions in attitudes and behavior by means of incomplete interconnections. For example, Rokeach speculated that competitive situations may lead to values being used as double standards. In the level III individual the high degree of value integration precludes using values differentially as the situation may warrant. The level II individual may, on the other hand, have established two discrete value

system subsets which are tied to varying conditions or groups. In the face of competitive conditions, one value subset (and its related attitudes) may be activated while another set is called for in cooperative situations. For either situation, the level II individual is acting in accord with his value hierarchy of the moment: the contradiction between situations is a function of the separate value subset.

It is important to note that value theory considers discrete content units while moral development theory deals primarily with structural aspects of reasoning. It is only slightly oversimplifying to suggest that values are the bricks and moral development stages are the mortar.

The divergence between the two theories, however, should not be overlooked. Rokeach's values possess considerable content which is not directly related to the concept of moral development. While moral development theory addresses itself to the problems of the competing claims of men, a substantial number of the values suggested by Rokeach have to do with personal competence (e.g., ambitious, capable) or with personal goals (e.g., self-respect, a sense of accomplishment). These content areas do not seem to have any direct, necessary theoretical connection to moral development. That is, from a moral development perspective, one can discuss the relative importance of values such as equality or obedient but there is less justification for discussing the importance of a value like an exciting life. It would seem that someone at stage 6 of moral development does not necessarily endanger his moral principles by putting either a high or low value on an exciting life. However, knowing the importance he attaches to an exciting life may provide us with considerable additional information about the individual not revealed by considering his level of moral reasoning along. Of course,

knowledge about his developmental stage may provide us with information about the structural relationships between non-moral values and other values, attitudes, and behaviors.

Hypotheses - Part II

As a part of the value-change experiment (outlined in Table 3, p. 36), the college student subjects completed the following instruments at the pretest: the value survey (Rokeach, 1971), the moral judgment interview (Kohlberg, 1958), and the multifactor racial attitude inventory (Woodmansee & Cook, 1967). The value survey and the racial attitude inventory were also completed again at the posttest. The discussion to this point has suggested that values and value systems should reflect in some direct manner the structural dimensions outlined by Kohlberg. Thus, grouping the subjects in the value-change experiment according to their levels of moral reasoning (as evidenced by the moral judgment interview) should reveal systematic differences between groups in values, attitudes, and reactions to the value change procedures.

Value System Stability. An index of the stability of the individual's terminal or instrumental value system is obtained by correlating his 18 value rankings on one occasion with a second set of rankings made on a later occasion. Rokeach (1973) reports median test-retest reliabilities for groups of college students ranging from .61 to .80. Individual value system reliabilities range from below -.30 to above .90.

The determinants of individual differences have not yet been fully explored and "[a]ll that can be said with some confidence is that sex, age, intellectual ability, and liberalism seem to be implicated [Rokeach, 1973, p. 36]." Hollen (1967) reports that value system stability is not

related to the respondents' levels of dogmatism (Rokeach, 1960) or to their ratings of value commitment, importance, uncertainty, and the like. One study (McLellan, 1970) has investigated the correlation between value system stability and stage of moral development among junior and senior high school students. When grade level was held constant, no significant correlation was observed. This failure of moral stage to predict value system stability was probably due to the restricted range of moral stages within grades since stability was observed to increase with age.

In spite of this negative finding, our theoretical analysis continues to suggest that one important determinant of value system stability is the degree to which the individual has internalized and integrated his values. Since the levels of moral reasoning represent, in part, successive steps in the internalization and integration of values, we would expect greater value system stability at the higher levels. More particularly, since the transition from level II to level III represents the greatest qualitative increase in internalization, level III subjects should have the most stable values. Since individuals at level I and level II are more influenced by environmental pressures and situational cues, their values should exhibit greater variation over time. These considerations lead to the following hypothesis:

HYPOTHESIS 3: The terminal and instrumental value systems of subjects functioning at level III of moral development will be more stable over time than the value systems of subjects functioning at level I or level II.

The negative findings reported by McLellan (1970) do not contradict this hypothesis because only a very small number of the school-age subjects in that study had achieved level III. Thus, those comparisons of value system stability between moral groups were primarily restricted to subjects below level III.

Value System Similarity. It has been noted that the stages of moral reasoning are not content or value-free. Rather, the stages represent, in part, successive steps toward a morality based on concepts of justice and equality. Kohlberg suggests that at the highest level of moral development (level III) there are only a very few principles which adequately fulfill the needs of the individual.

In the preconventional and conventional level [I & II], moral content or value is largely accidental or culture-bound. Anything from "honest" to "courage in battle" can be the central value. But in the higher postconventional level [III], Socrates, Lincoln, Thoreau and Martin Luther King tend to speak without confusion of tongues, as it were. This is because the ideal principles of any social structure are basically alike, if only because there aren't that many principles which are articulate, comprehensive, and integrated enough to be satisfying to the human intellect. And most of these principles have gone by the name of justice [Kohlberg, 1968, p. 30].

If this "goal" of moral development is correct, it should be evident in the ways in which people rank their values. Specifically, the values among people at level III should be more alike than the values among people at the lower levels. Indeed, as we move down the developmental scale, the influences of a person's unique social environment on his values should increase. Consequently, in a socially and culturally diverse population the values of people at lower levels of moral development will be more individualistic and less like the values of others. The values of people at level III, however, should reflect the limited number of satisfactory values available and these value systems should

be considerably more similar to one another. For the subjects in this study, this expectation may be stated in the following hypothesis:

HYPOTHESIS 4: The average intragroup terminal and instrumental value system similarity will increase at each successively higher level of moral reasoning.

Values and Attitudes. The structural aspects of moral development theory carry some clear implications for value-attitude linkages. Basically, as an individual moves up the developmental scale, his belief system becomes more and more unified and integrated. As an individual approaches and moves into level III, it becomes more reasonable to think of him as having a single, unified value system which is well integrated into the remainder of his belief system. At level III we expect attitudes to be responsive to the entire value system and not merely to isolated value subsets.

In this experiment, we are able to assess subjects' racial attitudes with the multifactor racial attitude inventory (Woodmansee & Cook, 1967). The inventory taps nine different factors of attitude toward black people: (1) integration-segregation policy, (2) acceptance in close personal relationships, (3) Negro inferiority, (4) ease in interracial contacts, (5) subtle derogatory beliefs, (6) local autonomy, (7) private rights, (8) acceptance in status-superior relationships, and (9) gradualism. The concept of equality between blacks and whites is an integral aspect of each of the ninety questions which are used to derive the total racial attitude score and thus, the value equality is logically implicated in

each question.

However, equality is implicated in a wide variety of different social situations and pitted against a variety of other value considerations. For example, questions from the local autonomy subscale pit the policy-making prerogatives of the local collective against the prerogatives of those outside the collective. The attitude questions, in effect, ask the subject to indicate the desirability or necessity of racial integration within a particular social or political context or to indicate his own subjective feelings about interacting with black people in varying social contexts.

If we assume (1) that these racial attitudes in some way directly reflect a person's values and (2) that each racial attitude question implicates equality, then the relative importance of equality should explain some portion of the variance of the racial attitude scores. More importantly, equality should be a better predictor of overall racial attitude for level III subjects than for subjects at the lower levels. The level III subject has a unified, integrated value system which directs his attitudes and the influence of the single value equality on each attitude response should remain fairly constant. That is, if equality is his most important value (vis-a-vis the other 17 terminal values) then any and all racial attitudes will be weighted heavily in an equalitarian direction. If equality is not important then any and all racial attitudes will be weighted in the direction of conflicting values which are more highly ranked than equality.

In contradistinction, the level II or level I subject has a value system which is organized into many discrete, independent and conflicting value subsets and the value equality may appear in a wide variety of

relative positions vis-a-vis other values within the various subsets. That is, even though equality may be ranked first in importance vis-a-vis all seventeen other terminal values on the value survey, it may be ranked considerably lower in any particular subset of values. Indeed, equality may not even appear in some subsets. For example, when the level II person is asked to agree with the statement "The Negro should be accorded equal rights through integration," equality may be of primary importance in determining his response. However, if asked to agree with the statement "Society has a moral right to insist that a community desegregate even if it doesn't want to," consideration of equality may well be subordinate to values such as freedom or family security.

In this way, summing across the whole range of attitude questions should reveal that the single value equality's predictive power is considerably lessened at the lower levels of moral reasoning. These expectations about the relationship between equality and racial attitudes may be stated in the following way:

HYPOTHESIS 5: The correlation between equality rank and total racial attitude score will be significantly higher for subjects at level III than for those at level I or II.

Effects of Moral Level on Value Change

To this point, we have predicted (in Chapter I) some differential effectiveness among the value change techniques and predicted (in this Chapter) differences in value systems related to level of moral reasoning.

Our next logical consideration concerns the interactive effects of level of moral reasoning and type of value change technique on value change. If we first try to express a general expectation about how subjects at the different moral levels might react to the Basic Value Change Technique (i.e., the Self & Others' Feedback treatment) we find that there are two conflicting sets of expectations.

Our first expectation about the effect of moral level on changes in the value equality is: level III subjects will evidence less change than level I or II subjects. This expectation is derived from the discussion in this chapter which suggests (a) that equality is a central principle of morality at level III and (b) that the highly integrated cognitive systems at level III imply fewer intracognitive contradictions.

First, if equality is a central principle at level III, then subjects reasoning at level III should initially rank the value equality higher (on the average) than subjects at the lower levels. From a purely mechanical perspective, this higher initial ranking of equality imposes a lower ceiling on the amount of upward value change possible. More importantly, the higher initial ranking by level III subjects may also represent a psychological barrier to change. For example, it may be more difficult to induce a 2-unit increase in a value initially ranked third than it is to induce a 2-unit change in a value initially ranked 14th. For a value to move from third to first in importance, the subject must simultaneously devalue his two most important values. In contrast, moving a value from 14th to 12th in importance requires reshuffling values of only minor importance. It is quite consistent with value theory to expect greater resistance to change where values to be affected are initially very important.

Second, we would expect less change among the level III subjects because of greater initial internal consistency. If both level II and level III subjects have conceptions of themselves as egalitarians, we expect that the values, attitudes, and behaviors of the level III subjects would be the most consistent with this self-conception. The level III subjects should (1) value equality more highly, (2) have more egalitarian attitudes, and (3) evidence more egalitarian behaviors than level II subjects. Since self-dissatisfaction is postulated as the trigger for value change, the level III moralist is less likely to be dissatisfied and thus less likely to change his values.

In one sense, the egalitarian values and morality of the level III ideal represent the goal toward which the value-change treatment hopes to impel subjects. To the extent that level III subjects are nearer this goal initially than subjects at the lower levels, there is reason to anticipate less change among level III subjects.

Our second general expectation partially contradicts the first discussed above in that there are persuasive reasons for anticipating more value change among some level III subjects under certain conditions. In the first place, no level III subject will actually achieve the ideal rational, consistent morality which the level III description implies. The struggle to achieve a workable level III morality is a difficult one and, as has been noted, the stages and levels merely represent ideal types along the continuum of development. Pigeon-holing subjects among the three levels only reveals their modal reasoning level and does not reveal the full range of conflicting processes.

Among subjects who have achieved level III in this modal sense, we would still expect to find some inconsistency and conflict among

self-conception, values, attitudes and behaviors. Where these conflicts exist, we would expect to find greater susceptibility to value modification efforts because the level III cognitive system is less tolerant of internal inconsistency. Insofar as inconsistency between values and self-conceptions exists among subjects at all moral levels, it is the level III subjects who should be most dissatisfied to discover such inconsistencies.

This greater tendency toward consistency at level III should be additionally apparent when we consider the different types of value modification procedures used in this experiment. It now seems likely that hypothesis 1 (p. 34), which predicts the effectiveness of each value change treatment, necessarily holds only for subjects at level II. That is, although a particular treatment is ineffective in general, the procedure might be effective for inducing value change in level III subjects.

For example, hypothesis I predicts that the Self Feedback (SF) treatment will not be effective because the subjects have no opportunity to validate their own values in the context of the value terms used or in terms of any external social referent. If an essential difference between level II and level III subjects is the degree of internalization of values, then the level III subjects have less need for any external referent and thus may make effective use of the information provided in the SF treatment procedure.

To the extent that there are multiple factors which lead to opposing predictions, it is difficult to determine in advance which factors might prevail. Indeed, the opposing influences may cancel one another. Thus, any hypothesis that one value-change treatment will be more or less

effective for level III subjects than for level II or I subjects would not be warranted. The best we can hope to do is analyze the data in a post hoc manner to discover what, if any, effects are present.

It may be instructive to note that previous research efforts to relate certain personality variables to value change have failed to reveal any significant relationships. Cochrane and Kelly (1971) examined a variety of personality characteristics in the context of comparing subjects who changed and who did not change in response to the Basic Value Change Treatment. In their first study, Cochrane and Kelly compared mean personality scores for subjects who changed their ranking of equality upward with those of subjects who did not change or changed in the opposite direction. No significant differences between the two groups were found on any of the variables (dogmatism, F score, neuroticism, social inhibition, inadequacy, and hyperaggressiveness). A second study differed only in that the subscales of the MMPI provided the dependent variables. Again there were no significant differences.

Rokeach (1973) likewise reports that the subjects' level of dogmatism is unrelated to value change. It is perhaps surprising that not one of these variables is significantly implicated in value change. Certainly the field of attitude change is replete with examples of such variables being related to persuasibility (e.g., Katz, Sarnoff, & McClintok, 1956 [ego-defensiveness]; Miller, 1965 [dogmatism]; Janis & Field, 1955 [social inhibition]). Of course, as has been pointed out, the Basic Value Change Treatment is not an attempt to "persuade" subjects to change their values in the way we might persuade subjects to eat fried grasshoppers.

Whether the subjects' level of moral reasoning will be more useful

in helping us understand the value change process is quite speculative and partly dependent on the answers to the prior hypotheses about the relationships between moral level and values and about the general effectiveness of the value change treatments.

Chapter III

METHOD

Overview. Each subject attended three group sessions: pretest, treatment, and posttest. The pretest-to-treatment intersession interval was three weeks. The treatment-to-posttest interval was four weeks [see Table 3 (page 36) for outline of experiment]. Subjects received differential treatment only at the treatment sessions, where each subject was randomly assigned to one of five treatment groups [see Table 2 (page 31)] .

Subjects

The initial subject pool consisted of 341 undergraduates enrolled in introductory psychology courses at Michigan State University. The subjects volunteered to participate in the study and received experimental credit toward their course grade for participating. A total of 300 white subjects¹⁰ (124 male, 176 female) successfully completed the pretest questionnaires. At the treatment sessions three weeks later, 291 of the 300 (97%) subjects were successfully recalled. Of these 291 subjects, 287 (98.6%) returned for the posttest session one month later.

¹⁰ A total of 341 students appeared at the pretest sessions. Of these, 36 were black and are not included in any analysis. Also, five white students who failed to complete all the questionnaires were dropped.

Pretest Sessions

Students who signed-up to participate in the study were asked to attend one of four pretest sessions held on consecutive evenings during the pretest week. When they arrived at the designated room for the pretest, the subjects were given a sheet covering the general nature of the study, information regarding requirements for receiving credit, and assurance of the confidentiality of their responses (Appendix A). Additionally, the experimenter verbally elaborated on these issues as well as on the right of any subject to withhold any information or to withdraw at any time.

At this first session, the subjects were told that they were participating in a study designed to uncover the interrelationships among a set of complex values and attitudes. Additionally, they were told that a major interest of the experimenters was how the subjects react to certain theoretical notions and procedures which are current in psychology. The experimenter explained that their subjective satisfaction with the tests being given was as important as their objective responses. That is, the tests were presented in a straightforward manner as tests of values and attitudes and the subject was asked to keep in mind how satisfactory each test was in "distilling" his or her own values and attitudes. The rationale given for this was that the experimenter wanted to know how accurately the subject was able to present himself within the limits of each test. The subjects' subjective reactions would be solicited for the purpose of making appropriate modifications. The subjects were told that the procedures for the final (posttest) session would depend, in part, on the reactions and suggestions of the subjects.

The subjects then individually completed the following instruments:

1. the Rokeach value survey - form D (Appendix B);
2. the multifactor racial attitude inventory (Appendix C); and
3. four moral conflict situations from the Kohlberg moral judgment interview (Appendix D).

It should be noted that the racial mix of students at the pretest sessions necessitated certain procedures which may have affected their responses. Since our concern is with the changes in the racial values of white subjects, participation by blacks was not necessary. However, it would have been inappropriate to preclude black student participation. For this reason, it was necessary to create a version of the racial attitude inventory which was appropriate for black students. When the test booklets were distributed, the participants were told that they would receive the appropriate version.

Assignment of subjects to moral level. Each subject responded in writing to four stimulus situations of the Kohlberg (1958) moral judgment interview. Two coders with previous experience independently coded each of the situations for each subject using the global rating method (Kohlberg, 1958).¹¹ With this method, each subject receives four scores (one for each moral situation) from each coder. Each score represents the stage or stages of moral reasoning used by the subject to deal with the moral conflict situation. On the basis of these situation scores, each subject was mechanically assigned a final score representing his modal level (I, II, or III) of moral reasoning. In some cases the distribution of situation scores prevented assigning a level-score to a subject. Eight of the 300 white subjects retained from the pretest session could not be assigned a level-score.

¹¹On the basis of weighted sum scores across the four situations, the ratings of the two coders correlated .82.

Treatment Sessions

Approximately two weeks after the pretest session, a letter (Appendix E) was sent to each subject asking him to report at a specified time and place for the treatment session. If the subject was unable to attend the designated session, he was asked to call and arrange an alternative meeting.

On each of four successive nights during the treatment week, five separate sessions were held. One of each five nightly sessions was one of the treatment sessions described below. Subjects were permitted to attend the experimental treatment to which they were randomly assigned on any of the four nights it was convenient. Additionally, any subject who failed to appear at his scheduled time was contacted immediately by phone and offered an opportunity to attend a later treatment session. This procedure minimized subject attrition.

The five treatments described below were previously discussed in Chapter I and are outlined in Table 1 (p. 30) and Table 2 (p. 31).

Self & Others' Feedback group (SOF). Subjects in this group received a treatment virtually identical¹² to the Basic Value Change

¹²The SOF procedure (Appendix F) uses a format identical to that used by Rokeach with the following modifications:

- A. The average value rankings reported in "Table 1" are for the 304 white students in this study rather than the 298 MSU students reported by Rokeach. The rho correlation between the two sets of ranking is .88.
- B. The results reported in "Table 2" are also based on the pretest rankings. Subjects are identified for or against civil rights on the basis of their score on the Integration-Segregation Policy subscale of the multifactor racial attitude inventory. Subjects active in civil rights are identified on the basis of self-reported activities. The resulting "Table 2" differed only slightly from that reported by Rokeach (1973).
- C. The post-experimental questions are presented in a 1-9 response format rather than the 1-11 format used by Rokeach. Questions 2, 3, 4, and 5 are retained from the Rokeach procedure while questions 1 and 6 have been added for this experiment.

Treatment used by Rokeach (1973). Each subject rank-ordered the terminal values of the Rokeach value survey for himself and again in the way he thought MSU students in general ranked the values. The subjects were then shown "Table 1" and "Table 2" (see Appendix F) while the experimenter interpreted the data for the subjects.

"Table 1" shows the average rankings of the terminal values for the subjects in the study as they actually ranked them at the pretest session. The experimenter pointed out that the subjects, as a group, had ranked freedom second in importance and equality tenth. The experimenter went on to suggest that this showed MSU students are much more concerned about their own freedom than about freedom for others.

After the subjects responded to a question about their own sympathy with and activity in civil rights, they were shown "Table 2". Again the experimenter interpreted these data, suggesting that "students who are active in civil rights are saying they care as much for the freedom of other people as they do about their own freedom, while students against civil rights are saying only their own freedom is important."

The subjects were asked to compare their own values with the findings presented in "Table 1" and "Table 2". Finally, they were asked to respond to a series of questions about the presentation and their own reactions to the material. [see Appendix F for the SOF booklet].

Self & Others' Feedback/No Interpretation group (SOF/N). This treatment varies from the SOF treatment above in that the subjects were asked to write out their own interpretation of "Table 1" and "Table 2". The experimenter merely described the data and asked that the subjects respond to it in any way that was meaningful to them.

The subjects were told that there were many ways the data could be

interpreted but since these data had been collected from them, our interest was in having them tell us what it meant. The SOF/N subjects were told that the experimenter could then compare his own interpretation with those of the subjects. As in the SOF group, subjects in the SOF/N group were asked to compare their own values with the data presented and to respond to the same post-treatment questionnaire. [see Appendix G for the SOF/N booklet].

Self Feedback group (SF). In this treatment, the subjects were asked to rank their own values only and were confronted with stimulus material and interpretations without reference to any actual finding about others' values. After ranking their own values, the subjects were told to look at their own values and attitude toward civil rights in light of the experimenter's "expectations" about the relationships among these variables. The experimenter first suggested that if the subject ranked freedom high, the subject was saying that he cares a great deal about his own freedom. Secondly, the experimenter suggested that the subject's concern for the freedom of others was reflected in his ranking of equality.

After answering the question on civil rights, the subjects were shown "Table 1" which is based on "Table 2" shown to the SOF subjects. This "Table 1" (see Appendix H) points out the experimenter's "theoretical expectations about the relationships between the values freedom and equality and civil rights activity." The experimenter suggested that civil rights attitude and activism will be reflected in differential rankings of equality.

The interpretation given by the experimenter was the same interpretation given in the SOF treatment except that no reference was ever

made to any data about the values of others in the study. This treatment was designed to have the subjects analyze their own values and attitudes in light of the experimenter's interpretation only. Following the self-examination, the SF subjects responded to a series of post-treatment questions similar to those responded by the SOF and SOF/N subjects. [see Appendix H for the SF booklet].

Others' Feedback group (OF). In this treatment, subjects did not rank their own values. They ranked the values only as they thought MSU students on the average would rank them. The subjects were then presented with the same "Table 1" and "Table 2" used in the SOF and SOF/N treatments. These data about the values and attitudes of students in the study were interpreted by the experimenter in the same fashion as in the SOF treatment except that the subjects were not asked their own civil rights attitudes and could not objectively compare their own values to the stimulus material. [see Appendix I for OF treatment booklet].

Control group. Subjects in this group ranked their own values and those of MSU students in general, as did the SOF and SOF/N subjects. Next, the control subjects completed a 50-item "Moral Values" questionnaire (Rettig and Pasamanick, 1959) in which they evaluated the "rightness" or "wrongness" of different situations or acts. Finally, the control subjects were presented with the average value rankings of the students in the study. No specific values were pointed out and no interpretation was made of these data. The control subjects were told that students in other sections (i.e., treatment) were involved in tasks using these data and it was being presented to them simply for their own information.

The control treatment selectively controls for (a) callback at the treatment session, (b) ranking of own and MSU values and (c) presentation

of the actual average MSU values. The purpose of this control treatment is to get a base level of value change within the experimental sample in the absence of any attempt to induce value change. The "Moral Values" questionnaire is sufficiently related to the nature of the study to be a credible task, yet sufficiently distinct in content so as to not call attention to any specific value cluster. Rather than being a wholly nonreactive treatment, the control treatment is designed to stimulate the control subjects as much as possible without ever directing their attention to the target values equality and freedom or to racial attitudes. [see Appendix J for the control treatment booklet].

Additional treatment considerations. At the pretest session, the subjects had been told that they would be randomly separated into different groups at the second (treatment) session. The reason given was that the experimenter desired to get student reaction to a number of different theoretical concerns. At the beginning of each treatment session, the subjects were reminded that the large initial group has been broken down into smaller groups for the reason given above. They were assured that their presence in one particular group was unrelated to any of their responses at the pretest session.

The subjects were also told that students in other sections were merely looking at different aspects of the values-attitude problem. The experimenter went on to express his understanding that the subjects may "wonder what it's all about" and may not perceive any relevant pattern in what they were doing. It was explained that they were participating in a large, on-going research program in a complex area and that participants at any one point cannot hope to see the whole scope of the research. The subjects were encouraged to do their best and to have faith that their

contribution was, in fact, significant.

The subjects were also told that the treatment procedure had two aims. First, to have them react to and evaluate some of the experimenter's ideas and interpretations (if applicable) from their own unique perspective. Second, to present them with some ideas and/or data which would stimulate them to examine their own beliefs.

Since it was necessary to hold sessions for each of the five treatment groups each night, it was impractical for a single experimenter to meet all groups. For this reason, four experimenters were used. Two female graduate students were responsible for the control sessions. The four experimental value-change treatment groups were met either by this author or by another male research assistant. Each of the male experimenters met two experimental groups each night. The groups were scheduled in a counterbalanced rotation so that each male experimenter met two subgroups of each experimental group over the four nights. In this way, each experimenter was responsible for approximately one-half of each experimental value-change group.

For analysis, subjects are pooled into their respective treatment group, regardless of which experimenter they met or which night they attended. To minimize differential effects between the two male experimenters, the presentations were detailed as much as possible without making the session too structured. It was felt that the treatments would be enhanced if a degree of informality and spontaneity was retained. Although such an approach allows for more possible bias than a scripted, rigid presentation, it was felt that the nature of the treatments required a degree of subject-experimenter rapport which could only be achieved in a less formal atmosphere. Subsequent analysis of value changes revealed

no significant differences related to differences in experimenter.

Posttest Sessions

To determine what, if any, changes occurred in the subjects' values and attitudes as a result of the experimental treatments, all subjects were recalled (see Appendix K) one month after the treatment sessions to again complete the value survey and the multifactor racial attitude inventory.¹³ Since recalling the subjects merely to readminister these tests might have made our intent to induce change unnecessarily (and also possibly breed boredom or hostility), it was necessary to present a credible alternative explanation for the recall. As noted above, the subjects had been told at the pretest session that the procedures at this final session would be dependent on their responses at the first two sessions. This had been reiterated at the treatment sessions and the subjects had been encouraged to make critical comments and helpful suggestions about the procedures and tests.

Based on the anticipated suggestions related to the value survey and the attitude inventory, these two instruments were presented at the posttest in modified form. The subjects were told that the two tests had been modified and the bases for modification had been their own comments and suggestions. The subjects were told that these modifications would hopefully improve the tests to allow the subjects to more accurately portray their own values and attitudes.

These modifications, while providing a rationale for readministering

¹³Four identical posttest sessions were scheduled on consecutive evenings. Subjects failing to appear on their scheduled evening were immediately contacted by phone and offered an opportunity to attend a later session.

the tests, were designed to give substantially the same information gathered at the pretest. The modified procedures are outlined below:

1. The value survey.

- A. The value survey (Form D) was completed in its original format by rank ordering the 36 values on gummed labels.

- B. AFTER completing the ranking procedure, the subjects were asked to renumber the value terms on an importance scale of 1 to 99 (see Appendix L).

2. The racial attitude inventory.

The same questions used at the pretest were repeated here.

However, new instructions (see Appendix M) were issued which were designed to "allow for a more sensitive expression of your own opinions." The new instructions expanded the response categories from two ("Agree" or "Disagree") to eight. For scoring purposes, the expanded categories were ignored.

Feedback. At the conclusion of the posttest sessions, subjects were given a feedback booklet containing (a) a printout of their value rankings from the pretest session, (b) the average value rankings for all subjects in the study and for a sample of the American people, and (c) information on the nature of the study (see Appendix N). The information on the study simply reiterated what the subjects had already been told and no explicit reference was made to our expectation about value change.

Chapter IV

RESULTS AND DISCUSSION

The presentation of the results follows the same order as the discussion in Chapters I and II. First, we consider the differential effectiveness of the five value change treatments. Second, we consider the relationships among values, value systems, and levels of moral reasoning. Finally, we consider the interactions among moral levels and the value change treatments.

1. Effects of the Value Change Treatments

We begin with consideration of the planned comparisons (set forth in Hypotheses 1 and 2) related to the differential effects of the five treatments on the target values equality and freedom. This is followed by post-hoc examination of the effects of the treatments on the other values, on responses to the post-treatment questionnaire, on value satisfaction, and on racial attitudes.

Equality and Freedom

Hypotheses 1 and 2 predict that only the Self & Others' Feedback and the Others' Feedback treatments will significantly increase subjects' rankings of the target values equality and freedom. To test these hypotheses, the mean posttest value ranking (adjusted for initial differences) for each experimental treatment group is compared to the control group

posttest mean by analysis of covariance (Winer, 1971). Table 5 displays these adjusted mean posttest value rankings for each group. Table 6 presents the planned comparisons appropriate for hypotheses 1 and 2.¹⁴

Hypothesis 1 (page 34) predicts that only the Self & Others' Feedback (SOF) and the Others' Feedback (OF) groups will rank equality significantly higher than the controls at the posttest. Table 6 reveals that the SOF group ranks equality 1.87 units higher than the control group and that this difference is significant beyond the .01 level. Thus, we conclude that the SOF treatment has retained its effectiveness for inducing equality change. The OF group, on the other hand, ranks equality only .82 units higher than the control group and this difference reaches significance only beyond the .10 level. Thus, the Others' Feedback treatment, while marginally effective in increasing equality ranking, appears to be less effective than the SOF treatment from which it is derived.

The remaining two variation treatments, the Self & Others' Feedback/No Interpretation (SOF/N) and the Self Feedback (SF) treatments yield posttest equality rankings only .28 and .25 units above that of the control group. In neither case does this difference approach significance. Thus, we conclude that neither the SOF/N nor the SF treatment is effective for changing equality ranking.

¹⁴The significance levels in Table 6 are chosen to reflect per-comparison error rates. Since the comparisons were preplanned and represent only a minority of possible comparisons, the non-independence of the comparisons should be of little importance (see Guenther, 1964; Winer, 1971). For a general discussion of simultaneous statistical inference, see Miller (1966). In addition, the use of per-comparison rates makes these statistical decisions more directly comparable to those of previous value-change studies.

TABLE 5. Adjusted mean posttest equality and freedom rankings.

Group	<u>n</u>	<u>Equality</u>	<u>Freedom</u>
Self & Others' Feedback	56	7.55	4.87
Others' Feedback	57	8.60	4.33
SOF/No Interpretation	62	9.17	5.52
Self Feedback	58	9.14	5.95
Control	54	9.42	5.75
		<u>F</u> = 3.09	3.33
Analyses of Covariance:	df = 4/281		4/281
		<u>p</u> < .025	< .025

Note.--Values are ranked from 1 (most important) to 18 (least important).

TABLE 6. Comparison of adjusted posttest equality and freedom means.

	<u>Equality</u>		<u>Freedom</u>	
	Mean diff.	<u>F</u>	Mean diff.	<u>F</u>
Control v. :				
Self & Others' Feedback	1.87	10.10***	.88	2.85**
Others' Feedback	.82	1.93*	1.42	7.51***
SOF/No Interpretation	.25	.19	.23	.20
Self Feedback	.28	.23	-.20	.15

Note.--See Table 5 for group means and n's.

* $p < .10$, ** $p < .05$, *** $p < .01$ (one-tailed).

Hypothesis 2 (page 34) predicts that only the SOF and OF treatments will again be successful in increasing freedom rankings. Table 6 reveals that the SOF group ranks freedom significantly ($p < .05$) higher (.88 units) than the control group at the posttest. As in the case with equality, the SOF treatment continues to be effective for inducing freedom change. The effectiveness of the OF treatment is also confirmed in Table 6: the OF group ranks freedom 1.42 units higher than the control group ($p < .01$). It is interesting to note that the OF treatment yields a mean freedom ranking that is .54 units higher than the parent SOF treatment.

Again, as is the case with equality, neither the SOF/N nor the SF treatment has any significant impact on freedom. The SOF/N mean is .23 units higher and the SF mean is .20 units lower than the control mean. Neither difference is significant. Of course, the one-tailed test used in Table 6 actually precludes determining the SF - control significance since the direction of the difference is contrary to our expectation. Although this difference is not large, the lower SF ranking at least opens the question of possible negative effects from the SF treatment.

Hypotheses 1 and 2 are both essentially confirmed by the data with only the effectiveness of the OF treatment on equality falling into the marginal category.

An alternative way of viewing the various treatment effects is to examine the value changes which occurred within each treatment during the course of the experiment. Table 7 presents the mean changes in equality and freedom rankings which occurred between the various value survey administrations. As expected, Table 7 reveals no significant changes occurring during the three weeks between the pretest and the treatment sessions for any of the four groups which ranked their own values at the

TABLE 7. Mean changes in equality and freedom for each treatment group.

		<u>n</u>	Pretest-to -Treatment change	Treatment- to-Posttest change	Pretest-to -Posttest change
<u>Equality:</u>	SOF	56	-.56	1.52***	.96*
	OF ^a	57	-	-	.25
	SF	58	-.67	.17	-.50
	SOF/N	62	-.03	.05	.02
	Control	54	.24	-.37	-.13
<u>Freedom:</u>	SOF	56	.50	.89*	1.39**
	OF ^a	57	-	-	2.05***
	SF	58	.34	.28	.62
	SOF/N	62	.57	.45	1.02*
	Control	54	-.22	.44	.22

* $p < .05$, ** $p < .01$, *** $p < .001$: t test for correlated measures (1-tail).

^a OF subjects did not rank their own values at the treatment session.

treatment session. Since the subjects ranked their own values at the beginning of the treatment session, only random changes were expected during this period. Of course, the OF subjects did not rank their own values at the OF treatment session and no evidence regarding this time period is available for the OF group.

The treatment-related changes were expected to occur during the four week treatment-to-posttest period. Among the four groups with treatment-to-posttest data, only the SOF group was expected to significantly increase its equality and freedom rankings. Table 7 again confirms this expectation by revealing that the SOF group increased its equality ranking 1.52 units ($p < .001$) and its freedom ranking .89 units ($p < .05$). No significant changes occurred in any of the three other groups: SOF/N, SF, or control.

The Others' Feedback group was also expected to increase its equality and freedom rankings following the treatment. However, we cannot directly observe this change since the OF subjects did not rank their own values at the treatment. All we can observe for the OF group are the changes which occurred during the entire seven-week pretest-to-posttest period. The OF group increased its equality ranking only .25 units ($p < .40$) over the duration of the experiment. Although this increase is second in size only to the SOF increase, it falls to materially increase our confidence in the effectiveness of the OF treatment for equality. The effectiveness for freedom, however, is made even clearer in Table 7. The OF group's freedom ranking increased 2.05 units ($p < .001$) over the seven-week period. This is the largest freedom increase found among the five groups.

Treatment Effects on Other Values

Due to the ipsative nature of the value survey, an increase in one value necessarily results in a decrease in at least one other value. Thus, changes in the target values will be accompanied by changes in the remainder of the terminal value system. However, data from a national sample of respondents to the value survey (Rokeach, 1973) reveal that the values within the terminal value scale are not highly correlated with one another.¹⁵ For this reason, even large changes in the target values of one group would not be expected to simultaneously produce equally large changes in any other particular value.

Rokeach (1973) reports that the Basic Value Change Treatment, in addition to its effects on equality and freedom, has a slight tendency to increase certain social values (such as a world at peace) and to decrease certain personal values (such as a comfortable life). These tendencies, however, are not consistently significant across the various experiments which have used the Basic Value Change Treatment (Rokeach, 1968, 1971; Rokeach & McLellan, 1972; Rokeach & Cochrane, 1972; Cochrane & Kelly, 1971). Thus, we could not anticipate any particular changes in values other than the target values equality and freedom.

Analyses of variance on the mean posttest rankings of the remaining 16 terminal values across the five experimental groups yield no significant ($p < .05$) F ratios. Among the 18 instrumental values also ranked at the posttest, only one of the 18 F ratios was significant (broadminded, $F = 4.3$, $df = 4/282$, $p < .01$). The fact that the experimental groups do

¹⁵The average intercorrelation among the 18 terminal values is $-.06$. The largest equality-other value correlation is $-.23$. The largest freedom-other value correlation is $-.16$.

not differ significantly on the 16 other terminal values suggests that any treatment-related changes in these values are relatively minor. The single instrumental-value significance may most probably be attributed to chance.

Responses to Post-treatment Questionnaire

At the conclusion of each treatment session, subjects responded to a variety of questions concerning their own reactions to the session. Of course, due to the variations in the treatments, the same questions could not be put to all subjects [see Appendices F - J]. The subjects responded to each question on a nine-point scale and the mean responses (Table 8) are compared across experimental groups using the Newman-Keuls procedure (Winer, 1971). With this procedure, the experimental groups' mean responses are ranked from highest to lowest and each pair of means within a set are compared for significant differences. In this way, we are able to pinpoint which treatments were reported to have more or less impact on the subjects. Table 8 reveals that there were no significant differences between any two experimental groups on three of the questions. These questions are: (2) "How well did you understand the material?", (5) "Do you feel that your responses were in any way hypocritical?", (6) "Right now, how satisfied do you feel about the way you have ranked the eighteen values?" In general, the subjects in all responding experimental groups understood their treatment, did not feel hypocritical, and were satisfied with their value rankings.

The remaining four questions in Table 8 do yield some significant group differences. Excluding question #7 (which includes the control group), the distinctively different group is the Self Feedback group.

TABLE 8. Mean responses to questions asked at end of treatment sessions.

1. "AGREE WITH <u>E</u> 's INTERPRETAION OF 'TABLE 2?'" (1=agree strongly, 9=disagree strongly)	Groups significantly ^a different														
<table><tr><td>OF</td><td>SOF</td><td>SF</td></tr><tr><td>3.0</td><td>3.8</td><td>4.3</td></tr></table>	OF	SOF	SF	3.0	3.8	4.3	OF : SF								
OF	SOF	SF													
3.0	3.8	4.3													
2. "UNDERSTAND MATERIAL PRESENTED?" (1=understood completely, 9=not at all)	-														
<table><tr><td>OF</td><td>SOF</td><td>SOF/N</td><td>SF</td></tr><tr><td>1.8</td><td>2.0</td><td>2.3</td><td>2.4</td></tr></table>	OF	SOF	SOF/N	SF	1.8	2.0	2.3	2.4							
OF	SOF	SOF/N	SF												
1.8	2.0	2.3	2.4												
3. "FIND PRESENTATION THOUGHT-PROVOKING?" (1=extremely t-p, 9=extremely boring)	OF : SF SOF : SF SOF/N : SF														
<table><tr><td>SOF</td><td>OF</td><td>SOF/N</td><td>SF</td></tr><tr><td>2.6</td><td>2.6</td><td>2.7</td><td>3.4</td></tr></table>	SOF	OF	SOF/N	SF	2.6	2.6	2.7	3.4							
SOF	OF	SOF/N	SF												
2.6	2.6	2.7	3.4												
4. "WILL THIS TECHNIQUE LEAD YOU TO DO MORE THINKING ABOUT YOUR OWN VALUES?" (1=yes, very much, 9=no, not at all)	OF : SF SOF/N : SF														
<table><tr><td>OF</td><td>SOF/N</td><td>SOF</td><td>SF</td></tr><tr><td>2.9</td><td>3.0</td><td>3.3</td><td>3.9</td></tr></table>	OF	SOF/N	SOF	SF	2.9	3.0	3.3	3.9							
OF	SOF/N	SOF	SF												
2.9	3.0	3.3	3.9												
5. "ARE YOUR RESPONSES IN ANY WAY HYPOCRITICAL?" (1=yes, very; 9=not, not at all)	-														
<table><tr><td>SOF/N</td><td>SF</td><td>SOF</td></tr><tr><td>5.8</td><td>6.1</td><td>6.7</td></tr></table>	SOF/N	SF	SOF	5.8	6.1	6.7									
SOF/N	SF	SOF													
5.8	6.1	6.7													
6. "ARE YOU SATISFIED WITH ALL 18 VALUE RANKINGS?" (1=extremely satis., 9=extremely dissat.)	-														
<table><tr><td>SOF</td><td>SF</td><td>SOF/N</td></tr><tr><td>3.4</td><td>3.4</td><td>3.9</td></tr></table>	SOF	SF	SOF/N	3.4	3.4	3.9									
SOF	SF	SOF/N													
3.4	3.4	3.9													
7. "YOUR TIME WELL SPENT PARTICIPATING IN THIS STUDY?" (1=wasting my time, 9=very worthwhile)	CONTL : SOF CONTL : OF														
<table><tr><td>CONTL</td><td>SF</td><td>SOF/N</td><td>SOF</td><td>OF</td></tr><tr><td>5.9</td><td>6.4</td><td>6.5</td><td>6.7</td><td>6.9</td></tr></table>	CONTL	SF	SOF/N	SOF	OF	5.9	6.4	6.5	6.7	6.9					
CONTL	SF	SOF/N	SOF	OF											
5.9	6.4	6.5	6.7	6.9											

Note.--See Appendices for exact wording of each question. Subjects responded to each question on a 9-interval scale.

^a Significant ($p < .05$) differences by Newman-Keuls procedure.

The Self Feedback subjects agree least with the experimenter's interpretation, found their presentation the least thought-provoking, and felt they would do the least thinking about their own values. However, in only one instance (question 3) is there a significant difference between the SF variation treatment and the SOF parent treatment. Thus, while lack of feedback about others' values has its deleterious consequences, it is not always the "complete" SOF treatment which elicits the most favorable response.

Specific Value Satisfaction

In addition to the questions just examined, subjects in the SOF, SOF/N, and SF groups were also asked to indicate whether they were "satisfied" or "dissatisfied" with their previous ranking of each of the eighteen terminal values. Rokeach (1973) reports that subjects who are dissatisfied with a value ranking subsequently change that value's ranking more so than subjects who are satisfied. Table 9 presents the mean absolute treatment-to-posttest change in the values freedom and equality for subjects in this study who said they were satisfied or dissatisfied with their ranking of each value at the end of their treatment session.

Although the percentage of dissatisfied subjects varies between 24 and 34 per cent for equality and between 20 and 30 per cent for freedom, the differences between groups are not significant (by Chi-square). This is surprising since specific value dissatisfaction is thought to trigger value change and we might have expected the successful SOF treatment to yield a higher percentage of dissatisfied subjects than either of the unsuccessful treatments.

TABLE 9. Mean absolute change in freedom and equality for satisfied and dissatisfied subjects.

	<u>Equality</u> Change				<u>Freedom</u> Change			
	Satisfied with <u>equality</u>		Dissatisfied with <u>equality</u>		Satisfied with <u>freedom</u>		Dissatisfied with <u>freedom</u>	
	(n)		(n)		(n)		(n)	
SOF	(37)	1.58	(19)	4.26	(42)	1.90	(14)	4.14
SOF/N	(47)	1.91	(15)	2.87	(50)	1.76	(12)	3.33
SF	(39)	1.64	(19)	2.63	(41)	1.27	(17)	3.18

ANALYSES OF VARIANCE

	SOURCE	df	MS	F	p
<u>Equality:</u>	Group (A)	2	7.71	1.66	
	Satisfaction (B)	1	87.58	18.81	< .001
	A x B Interaction	2	12.11	2.60	< .10
	Error	170	4.66		
<u>Freedom:</u>	Group (A)	2	6.93	1.08	
	Satisfaction (B)	1	116.17	18.22	< .001
	A x B Interaction	2	1.18	.18	
	Error	170	6.37		

Note.--Change is treatment-to-posttest.

Nevertheless, two-way (Group x Satisfaction) analyses of variance (Table 9) yield significant ($p < .001$) F ratios only for the main effect of satisfaction. This result is consistent with previous findings revealing greater change for the dissatisfied subjects. In every instance, subjects dissatisfied with their value ranking changed more than subjects who were satisfied. However, the interaction effect between group and satisfaction for the value equality approaches significance beyond the .10 level. Examination of the means in Table 9 indicates that the SOF subjects who were dissatisfied with their equality ranking changed their ranking considerably more than did dissatisfied subjects in either the SOF/N or SF group. This suggests that while the treatments do not differ greatly in the percentage of subjects who indicate target value dissatisfaction, the dissatisfaction engendered by the SOF treatment may be more potent than the dissatisfaction engendered by the SOF/N or SF treatments. The results for freedom are in the same direction although the interaction effect does not approach significance.

Perhaps the major finding in Table 9 arises from the fact that a substantial number of the subjects in the SOF/N and SF treatments did experience dissatisfaction with their equality or freedom ranking and this dissatisfaction did result in greater change. This suggests that even though the SOF/N and SF treatments failed to induce significant positive target value change for their groups as a whole, a portion of the subjects may have been substantially affected by their respective treatment, although less so than the SOF subjects.

Attitude Change

We noted that Rokeach (1973) reports that racial attitude changes

in the direction of the equality changes are not apparent in the first weeks following a value change experiment. For this reason, no significant differential racial attitude changes were expected to occur as a result of the treatments in this experiment.

Table 10 displays the mean posttest racial attitude score (adjusted for initial differences by covariance analysis) for the five treatments. Although analysis of covariance yields a significant ($p < .05$) F ratio, the direction of the group differences are not consistent with the value differences shown in Table 5 (page 79). The most egalitarian mean attitude is found for the SOF/N treatment followed, in order, by the SOF, OF, control, and SF treatments. Application of the Newman-Keuls procedure (see page 78) to these mean racial attitude scores reveals that the significant differences occur between the SOF/N and SF treatments and between the SOF and SF treatments.

These findings are somewhat anomalous since the largest attitude difference is found between the two experimental treatments which were both ineffective in increasing equality rankings. It is possible that the SOF/N treatment is an effective attitude-change treatment although it is not an effective value-change treatment. However, the fact that none of the experimental groups evidence racial attitudes significantly higher than the control group suggests that these differences are attributable to some factor other than the value change treatments themselves, most probably chance. This finding, therefore, must be regarded very tentatively.

Summary and Discussion

Insofar as we are concerned with the differential effectiveness of

TABLE 10. Adjusted mean posttest racial attitude scores.

Group	n	Racial Attitude
SOF/No Interpretation	62	62.96
Self & Others' Feedback	56	62.83
Others' Feedback	57	61.78
Control	54	60.68
Self Feedback	58	59.34
F = 2.47		
Analysis of Covariance:	df = 4/281	
	p < .05	

Note.-- Higher score is more egalitarian.

the various value change treatments, we are able to conclude the following:

- (1) The Self & Others' Feedback treatment continues to be an effective method for inducing positive change in equality and freedom.
- (2) The Others' Feedback treatment is effective for inducing positive change in freedom and marginally effective for equality.
- (3) The Self & Others' Feedback/No Interpretation treatment is not an effective method for inducing value change.
- (4) The Self Feedback treatment is not an effective method for inducing value change.

These conclusions are important for what they imply about the importance of the three types of feedback provided by the experimenter in the value change procedure. Since the Self & Others' Feedback and Others' Feedback treatments are effective, they must provide the necessary information. Thus, feedback about self must not be crucial for the induction of change because it was not provided to the OF subjects. In contrast, the ineffectiveness of the Self & Others' Feedback/No Interpretation and the Self Feedback treatments implies that both (a) the experimenter's interpretation and (b) the others' feedback are crucial elements for inducing value change.

Before discussing these conclusions further, we should first note an important limitation inherent in this experiment regarding the conceptualization and operationalization of the three types of experimenter-provided information. For example, the difference between the Self & Others' Feedback treatment and the variation Self Feedback treatment is conceptualized as the absence of the variable "feedback about others' values" in the Self Feedback treatment (Table 1, p. 30). The

actual operational differences, however, are much more complex (Table 2, p. 31). The SF subjects (in comparison to the SOF subjects) do not guess MSU values, do not see "Table 1", do not compare their own values to "Table 1", are shown a variant of "Table 2", and so forth.

These complex procedural differences between the parent treatment and the variation treatments make it more difficult to attribute the differential outcomes to the simpler conceptual variables "feedback about others", "the experimenter's interpretation", and "feedback about self". In the final analysis, there is no way to determine from this experiment which of the actual operational differences between treatments play greater or lesser roles in the value-change differences. Even if these conceptual/operational difficulties could be overcome, it is important to note that the roles which these conceptual variables play in the value-change process remain speculative and the empirical results remain subject to alternative theoretical interpretations. However, the major concern of this work is not whether value theory provides the only explanation for these results, but is whether the results are minimally consistent with value theory's predictions.

Interpretive feedback. Subjects in the Self & Others' Feedback/No Interpretation treatment were asked to provide their own individual interpretations of the stimulus materials in "Table 1" and "Table 2". The SOF/N subjects were shown that other MSU students in general ranked freedom higher than equality ("Table 1") and that students active in civil rights ranked equality higher than students against civil rights ("Table 2").

It was seen in Table 8 (page 86) that the SOF/N responses to the post-treatment questionnaire do not differ significantly from those of

the SOF group. Why, then, does the SOF/N group evidence so little positive change in either of the target values while the SOF group changes significantly on both?

The experimenter's interpretation of the stimulus data essentially forces the subject with a value/self-conception conflict to acknowledge the possibility that his values are in conflict with his self-conception. If the subject recognizes and acknowledges the conflict, self-dissatisfaction should occur. If the subject fails to acknowledge the conflict, either because he fails to see the implication of the data for himself or defensively avoids acknowledging the conflict, no dissatisfaction should occur. In essence, the stimulus data threaten the state of the subject's belief system and the experimenter's interpretation eliminates many of the non-threatening interpretations at which the subject might conveniently arrive on his own.

Since SOF/N subjects are asked to write out their own interpretation of the stimulus data, it is possible to analyze the contents of these written interpretations to see if the subjects do or do not make potentially self-threatening interpretations. The SOF/N protocols were read in a single-blind procedure and categorized as either "correct" or "incorrect". A "correct" interpretation is one judged to be similar to experimenter's interpretation offered in the SOF treatment which contrasts freedom-for-self and freedom-for-others. An "incorrect" interpretation is one that does not contrast the equality - freedom differences. For example, interpretations which merely equate a value with a need ("Whites don't care about equality because they already have it.") or disparage a value ("People are sick of civil rights activists and minority demands.") are categorized as "incorrect". Twenty-one of the

SOF/N interpretations were judged to be "correct" and 41 were judged to be "incorrect".

If we assume that a "correct" interpretation is potentially more personally threatening than an "incorrect" interpretation because it clearly recognizes possible value/self-conception conflicts, then Table 11 suggests why the SOF/N treatment is ineffective in inducing value change. The SOF/N subjects are categorized into one of four groups based on their ranking of equality and freedom at the treatment. The four categories are: (1) ranks both equality and freedom high, (2) ranks both equality and freedom low, (3) ranks equality high and freedom low, and (4) ranks equality low and freedom high.¹⁶ Table 11 reveals the percentage of SOF/N subjects within each category who made a "correct" interpretation of the stimulus material.

As we know from previous research, the greatest value change is observed in those subjects who have low initial target value rankings. Obviously, a high initial equality ranking implies less value/self-conception conflict and thus less value change would be expected to occur. Among 17 SOF/N subjects who already rank both equality and freedom highly, over 70 per cent interpret the stimulus material "correctly". Among those subjects who rank either equality or freedom low, the percentage drops to around 25 per cent. Among the 16 most potentially conflictual subjects (those who rank both target values low), only one (6.7%) is able to give a "correct" interpretation.

It is clear from Table 11 that as subjects more and more become

¹⁶ "High" means ranked above the median; "low" means ranked at or below the median.

TABLE 11. Percent of SOF/N subjects at varying levels of equality and freedom "correctly" interpreting SOF/N stimulus materials.

		Initial <u>Equality</u> rank	
		High (1-9)	Low (10-18)
<u>Initial Freedom rank</u>	High (1-5)	N = 17 n "correct" = 12 % "correct" = 70.5	N = 15 n "correct" = 4 % "correct" = 26.7
	Low (6-18)	N = 14 n "correct" = 4 % "correct" = 28.6	N = 16 n "correct" = 1 % "correct" = 6.7

potential beneficiaries of the value change procedure by virtue of their value rankings, it becomes more and more likely that they will avoid the necessary self-confrontation. That is, they will avoid directly contrasting the stimulus data on the two target values. This defensive reaction is easily operationalized in the SOF/N treatment by allowing the subjects to provide themselves with evasive, non-threatening interpretations of the stimulus material. In a sense, the SOF/N subject is allowed the privilege of self-diagnosis and the more threatening the symptoms become, the more the subject tries to deny their existence.

The finding that the experimenter's interpretive feedback is a crucial element of the SOF procedure confirms the difficulty of inducing value change and lends credence to the notion that the experimenter serves the function of articulating social expectations (already internalized by the subject). To be sure, further research is required to determine what effect various qualitatively-different interpretations might have on the change process. It is not improbable that the current interpretation contrasting freedom-for-self and freedom-for-others could be improved to enhance the impact of the treatment.

The fact that the interpretive material is a necessary element in the procedure raises the question whether it is a sufficient element. Value theory suggests that persuasion alone is insufficient to induce value change and the failure of the Self Feedback treatment, discussed below, confirms this suggestion.

Feedback of others' values. The Self Feedback treatment attempts to induce change with only self-value feedback and the interpretive feedback. No reference to the values or attitudes of other persons is used and thus, the SF subjects are deprived of any objective, external value

referent. In Chapter I, the others' feedback element was seen as serving two simultaneous functions for the subject: (1) to provide evidence of the objective validity of the value terms and (2) to provide evidence of the validity of his own value rankings. The first function is served when the subject compares his own internal knowledge of the external group's values to the objective value rankings of that group presented to him in the treatment. The second function is served when the subject applies this validity to his own individual rankings to assure himself that his value rankings are fair representations of his internal value preferences. It was suggested that the lack of this value validation in the SF procedure would prevent the SF subjects from experiencing sufficient self-dissatisfaction to induce value change.

The results clearly show that the Self Feedback treatment is ineffective in inducing significant equality or freedom changes. However, it is not possible to conclude that the SF treatment's ineffectiveness is attributable solely to the hypothesized role of the others' feedback variable. The SF treatment is the most operationally different variation of the SOF parent treatment. The SF presentation is somewhat less concrete than the SOF treatment because it is necessary to attempt an equivalent presentation without the benefit of the stimulus data on MSU values. However, the post-treatment questionnaire (Table 8, page 86) reveals that the SF subjects reported that they understood their presentation nearly as well as any other treatment group. Thus, the ineffectiveness of the SF treatment is probably not due to any simple failure to communicate with the SF subjects.

The SF subjects did, however, find their presentation significantly less thought-provoking than subjects in the other treatment groups. This

suggests that the SF subjects failed to experience the same self-insights experiences by subjects in the other groups. It is likely that the SF subjects were either unable or unwilling to confront their own internal inconsistencies. When faced with his own value rankings and the experimenter's interpretation, the subject's defenses may suggest that the value labels "don't really mean anything" or that the ranking procedure is unreliable. In this way, the subject has an opportunity to avoid the threatening implications of the SF treatment. By doubting the value ranking procedure, the subject avoids the motivating self-confrontation.

The most important question raised by the failure of the SF treatment is that of the relationship between the individual's values and the values of his culture. The data suggest that the individual needs some external referent for judging his own internal values. If no external referent were needed, the SF subjects had all the necessary information to discover their own value/self-conception inconsistencies. They know their own values, knew their own self-conceptions, and were confronted with society's expectation regarding equality/egalitarianism. Further research is needed to determine whether the SF subjects failure to experience self-dissatisfaction is due (a) to mere mechanical distrust of the value measuring instrument or (b) to a more generalized need for some social comparison.¹⁷

¹⁷ It is implicit in value theory that the social comparison processes involving values are functionally distinguishable from social comparison process involving less central cognitive elements such as attitudes (For example, see Festinger, 1954; Pepitone, 1964; Schachter, 1959; Stouffer, et.al., 1949; Thibaut & Kelly, 1959). When an individual's values are brought into question, the primary evaluative standard is thought to be his own self-conception. Social comparison processes are thought to play a more active role in value acquisition and in those instances where the self-conception as well as the values are threatened.

Additionally, if feedback of others' values is necessary to satisfy a need for social comparison, other questions are raised about the extent of feedback necessary. Which values need be fed back? Whose values should they be? Does the feedback have to be accurate? An interesting test of the role of others' feedback in the value change process would be to vary the accuracy of the feedback and to compare the effectiveness of the procedures.

Feedback about own values. The Others' Feedback treatment replicates the Rokeach & McLellan (1972) study which found that value change could be induced without providing subjects with objective feedback about their own values. Although the results for equality are marginally significant ($p < .10$), the OF treatment was exceeded in effectiveness only by the parent SOF treatment. The effectiveness of the OF treatment on freedom is clearly replicated.

The post-treatment questionnaire (Table 8, page 86) suggests that the OF treatment is the best received treatment. OF subjects report that they agree most with the experimenter's interpretation, say they understand their presentation the best, and say they will do the most thinking about their own values. Although none of these differences is significant, they suggest that the OF treatment does not arouse the defensiveness thought to be aroused in the SF and SOF/N treatments. The OF treatment does not formally confront the subject with his own personal inconsistencies and he is free to evaluate the material in whatever way he sees fit. However, his own subjective awareness of his target value rankings coupled with the others' feedback and the experimenter's interpretation make it difficult to ignore any inconsistencies which exist.

One interesting result observed in the Rokeach & McLellan study is

again observed here: the change in the value freedom induced by the Others' Feedback variation treatment is greater than the change induced by the parent Self & Others' Feedback treatment. It is possible to speculate that allowing the subjects to rank their own values somehow inhibits freedom change. Alternatively, it is possible that the OF subjects who do not rank their own values come to feel that they value freedom less than they would objectively rank it and thus are more dissatisfied than those SOF subjects who can see their own objective freedom ranking. However, it should be noted that in the Rokeach & McLellan study, the OF equality change was also greater than the SOF equality change; a result which did not occur in this experiment.

Rokeach (1973) convincingly argues that methodological artifacts such as demand characteristics (Orne, 1962) and evaluation apprehension (Rosenberg, 1965) could not be responsible for his value-change results since the observed behavioral outcomes related to the value changes were remote in both time and place from the experimental setting. The ineffectiveness of the Self Feedback and the Self & Others' Feedback/No Interpretation treatments strongly support that argument. In the SOF/N treatment, the experimenter explicitly pointed out the target values and suggested by implication that a low ranking of either equality or freedom was undesirable. In the SF treatment, the subjects were explicitly told exactly how the experimenter thought they ought to rank equality and freedom. When these subjects returned for the posttest and again responded to the value survey, any subject who wished to look good or to please the experimenter would have had no difficulty in ranking equality and freedom at the top of his list. The important finding is

that no such effects were evident.

The failure of the SF and SOF/N treatments not only directly refutes any suggestion that the SOF and OF changes are artifacts but also attests to the viability of the value survey and to the existence of some narrower range of circumstances which will lead to observed value change. Perhaps the strongest conclusion which can be reached from these data is that it is very difficult to produce the appearance of value change in the absence of actual value reorganization.

A further criticism which might be advanced is the suggestion that failure of the SF and SOF/N treatments is the result of some experimenter bias (Rosenberg & Rosnow, 1969). Since the experimenters were not blind to the experimental purposes, they might have communicated their expectations of "no value change" to the SF and SOF/N subjects. The difficulty with this criticism is that the experimenters actually expected subjects at one or more moral levels to respond positively to each of the value-change treatments. Thus, it would be more likely that the experimenters communicated an expectancy of change rather than an expectancy of no change.

* The conclusions reached here that value change can be induced only where there is some minimum feedback of other's values and some minimum evaluative interpretation are, of course, strictly limited to this subject population and to the particular target values equality and freedom. In many respects, the white, midwest college students who served in this experiment and in others (Rokeach, 1973; Rokeach & McLellan, 1972; Rokeach & Cochrane, 1972; Cochrane & Kelly, 1971) may be the ideal subjects for these value change procedures. Undoubtedly an important aspect of the college experience is the opportunity, perhaps for the

first time, to question the values and morality of self and society. It is likely that the value change procedures provide a unique opportunity in which the student can consider the difficult problems of choosing among desirable value preferences and thus the procedures take advantage of the naturally-occurring introspective predisposition of the subjects.

In addition, the campus community traditionally emphasizes greater personal freedom and greater egalitarianism as appropriate personal goals. The value-change procedures undoubtedly benefit from this atmosphere which encourages the same value changes selected by the experimental procedure. Bem (1970) suggested that the successful results of the first value-change experiment (Rokeach, 1968) might be wholly attributed to the effects of this social pressure rather than to self-dissatisfaction. Rokeach (1973) counters Bem's argument by pointing to the wide range of subsequent attitudinal and behavior changes and to the failure of control subjects to change in the same socially-desirable direction. Our results clearly support Rokeach's view by demonstrating that explicit efforts aimed at moving the subjects in the socially desired direction are not successful in the absence of others' feedback and the evaluative interpretation.

Nevertheless, it is not yet demonstrable that social pressure plays no important role in the value-change process. With some assurance we can say that social pressure is not a sufficient condition precedent to value change but it still is possible to view social pressure as a necessary condition precedent. That is, can values be changed in a direction directly counter to the prevailing social pressure or must the change always be in the direction of that pressure? The social

nature of values suggests that socially undesirable value changes are less likely to occur. For example, would it be possible to effectively induce these subjects to decrease their equality ranking? Even if such a procedure were ethically defensible, it seems probable that it would not be possible in the face of strong social pressures to the contrary.

There are, of course, many values which society does not strongly encourage or discourage. For example, the values wisdom or clean do not command the interest of society as do the values freedom and equality. For these values, social pressure or social sanctions may be relatively unimportant and the subjects' self-conceptions may play the sole important role in the value-change process. Indeed, Rokeach (1973) clearly demonstrates that greater value change occurs for any value with which the subject is dissatisfied.

Regardless of the process by which value change occurs, this research continues to illuminate some practical problems inherent in evaluating the success of the value-change procedures. The use of group value means to assess the impact of the treatments obscures certain individualistic responses to the various treatments. For example, even though the Self Feedback treatment was generally ineffective in inducing equality change, some SF subjects increased their equality ranking as much as 11 scale units. For these subjects, the SF treatment was spectacularly effective. Likewise, it is observable that nearly 41 per cent of the subjects in the successful SOF treatment who initially ranked equality tenth or lower either failed to change their equality ranking or actually decreased it. For these subjects, the SOF treatment was not an effective treatment. These results continue to show that no one treatment is best for all participants and

continue to highlight the need for further value-change experimentation designed to more fully explore the value-change process.

Finally, this research has not directly considered the role of the self-conception in the value-change process. The assumption that the self-conception is the single most crucial element in the value-change process deserves considerable attention in future research. Equally deserving of attention is the reciprocal role that the values play in the development and maintenance of the self-conception.

2. Value Systems and Moral Level

We turn now to a consideration of the interrelationships among the subjects' developmental levels of moral reasoning and their value systems. Subjects are categorized into one of the three levels of Kohlberg's developmental scheme (see Table 4, page 44): Level I (n = 42) is the pre-conventional moral level, level II (n = 204) is the conventional moral level, and level III (n = 33) is the post-conventional moral level. The number of level III subjects in the sample is approximately one-half the number expected from results obtained in a pilot study and from the work reported by Kramer (1968). Thus, our sample is skewed somewhat toward the lower two levels.

Value System Stability

Hypothesis 3 (page 56) predicts that level III moralists will have significantly more stable terminal and instrumental value systems than lower level subjects due to the greater integration and internalization of values at level III. Value system stability is computed by

correlating a subject's pretest and posttest value rankings. Thus, we compute two value system stability coefficients for each subject: one for the terminal value system and one for the instrumental value system. However, since the seven-week pretest-to-posttest interval includes the four-week post-treatment period, any differential terminal value system stability related to treatment effects might confound the effects of moral level. Therefore, a second terminal system coefficient which is free of any treatment effects is also computed for the three-week pretest-to-treatment period.¹⁸

Table 12 presents these mean value system stability coefficients for subjects at each of the three moral levels. It is apparent that in each instance the level III moralists have the highest average stability. To test hypothesis 3, each level III mean stability coefficient is compared to the appropriate level I and level II means.¹⁹ Over the three-week pretest-to-treatment interval, the average terminal value system stability for level III is .85. This average is significantly greater than the averages for level I ($\bar{X}_I = .76$, $t = 3.3$, $p < .01$) and level II ($\bar{X}_{II} = .76$, $t = 3.3$, $p < .01$). Over the entire seven-week period, the average terminal system stability for level III is .83. This average is again significantly greater than the average for either level I ($\bar{X}_I = .74$, $t = 2.9$, $p < .05$) or level II ($\bar{X}_{II} = .68$, $t = 3.7$, $p < .01$). The results for the instrumental value systems are similar. The average level III instrumental stability ($\bar{X}_{III} = .77$) is significantly greater

¹⁸ There is no comparable 3-week coefficient possible for the instrumental system since subjects did not rank the instrumental values at the treatment.

¹⁹ Comparison by Dunnett's t (Dunnett, 1955, 1964; Winer, 1971). The alpha level for each pair of comparisons is set at .05 (two-tailed).

TABLE 12. Mean intralevel value system stability coefficients (rho).

Level of Moral Development				
	I	II	III	
N (3 weeks) = 37		162	25	
N (7 weeks) = 42		204	33	F
Terminal Value System:				
3 weeks	.76	.76	.85	3.07*
7 weeks	.74	.75	.83	5.17**
Instrumental Value System:				
7 weeks	.71	.68	.77	4.10*

Note.-- 3 week period is pretest-to-treatment (OF subjects not included).
 7 week period is pretest-to-posttest (All subjects included).

* $p < .05$, ** $p < .01$.

than the average for either level I ($\bar{X}_I = .71$, $t = 2.3$, $p < .05$) or level II ($\bar{X}_{II} = .68$, $t = 3.7$, $p < .01$). Hypothesis 3 is thus confirmed.

Value System Similarity

Hypothesis 4 (page 58) predicts that subjects at higher moral levels will have increasingly more similar value systems due to the increasing scarcity of values which satisfy the intellectual and moral needs of individuals functioning at the higher levels. This hypothesis is tested by correlating the terminal or instrumental value rankings of each subject with the terminal or instrumental rankings of every other subject at the same moral level. Each of these correlations is an index of the degree to which the two subjects rank-order the values in the same way. Within each moral-level group, these terminal and instrumental correlations are averaged to obtain indexes of intragroup terminal and instrumental value system similarity. The more a group tends to share the same value preferences, the higher the mean intragroup similarity index will be.²⁰

Table 13 presents the mean pretest intragroup value system similarity indexes for both the terminal and instrumental value systems and it is apparent that value system similarity increases with moral development as predicted in hypothesis 4. For the terminal values, the average system correlation among the level I subjects is only .20. This increases to .27 among the level II subjects and to .39 among the level III subjects. The pattern for instrumental value system similarity is

²⁰ An alternative index which might have been employed is Kendall's concordance coefficient, W (Siegal, 1958). W is a linear function of the mean intragroup correlation.

TABLE 13. Mean intralevel value system similarity coefficients (rho).

	Level of Moral Development		
	I	II	III
N =	42	204	33
Terminal Value System:	.20	.27	.39
Instrumental Value System:	.23	.26	.32

Note.-- A larger similarity coefficient indicates greater intragroup value system similarity.

the same. The similarity index increases from .23 at level I to .26 at level II and to .32 at level III.

Since the individual correlations among subjects within a moral level are not independent, the means in Table 13 cannot be tested for differences with the usual statistical tests. However, the null hypothesis implicitly being tested in hypothesis 4 is that the order of the means in Table 13 is unrelated to moral level. If the order of the terminal or instrumental means is randomly determined, there are six equally-likely orders which the three means might assume. Thus, there is one chance in six of obtaining the exact order predicted ($X_I < X_{II} < X_{III}$). In addition, the null hypothesis assumes that the order of the terminal means is independent of the instrumental means because the two scales are ranked independently and because Rokeach (1973) reports that the average correlation between terminal and instrumental values is .01 among a sample of the American people. Thus, the joint probability of obtaining the exact order predicted for both systems in hypothesis 4 is $(1/6 \times 1/6) = 1/36$ or .028. Therefore, we reject the null hypothesis and conclude that value system similarity increases at each successively higher level of moral reasoning.

Although hypothesis 4 is confirmed, this overall value system similarity data does not reveal which particular values are being shared or which values distinguish subjects at the various moral levels.

Tables 14 and 15 display the mean pretest value rankings and the composite rank orders of the means for subjects at each moral level. Additionally, the F ratios provide a relative index of the between-group differences in the value rankings. Significant ($p < .05$) F ratios are observed for four of the terminal values and for seven of the

TABLE 14. Mean pretest terminal value rankings and composite rank orders for subjects at three levels of moral development.

	Moral Level			<u>F</u>
	I	II	III	
	N = 42	204	33	
	Mean Rnk	Mean Rnk	Mean Rnk	
A comfortable life	10.64 14	12.20 15	13.76 16	4.4 *
An exciting life	9.95 11	11.21 13	11.39 13	1.4
A sense of accompl.	8.00 5	9.13 9	8.79 10	1.2
A world at peace	7.69 4	7.82 8	5.55 1	3.0 *
A world of beauty	10.36 13	11.19 12	11.09 12	< 1
Equality	9.07 10	9.17 11	6.97 7	3.3 *
Family security	10.26 12	9.14 10	9.97 11	1.5
Freedom	6.67 2	6.46 2	5.88 2	< 1
Happiness	5.81 1	5.51 1	6.30 3	< 1
Inner harmony	8.00 6	6.90 3	6.55 5	1.1
Mature love	6.86 3	7.04 5	6.52 4	< 1
National security	13.36 16	14.78 18	15.85 18	4.5 *
Pleasure	11.29 15	12.38 16	13.42 15	2.6
Salvation	13.88 17	11.81 14	12.91 14	1.9
Self-respect	8.38 9	7.58 7	7.61 9	< 1
Social recognition	14.26 18	14.24 17	14.67 17	< 1
True friendship	8.19 7	7.00 4	7.03 8	1.8
Wisdom	8.33 8	7.53 6	6.76 6	1.3

* $p < .05$.

TABLE 15. Mean pretest instrumental value rankings and composite rank orders for subjects at three levels of moral development.

	Moral Level						<u>F</u>
	I		II		III		
	N = 42		204		33		
	Mean	Rnk	Mean	Rnk	Mean	Rnk	
Ambitious	8.67	7	9.42	9	9.61	11	< 1
Broadminded	6.43	3	6.97	4	5.61	2	1.3
Capable	9.40	9	10.20	10	10.27	13	< 1
Cheerful	8.93	8	8.57	7	9.48	10	< 1
Clean	11.93	16	13.57	17	14.94	17	4.8**
Courageous	9.62	11	10.34	11	8.88	8	1.8
Forgiving	8.29	6	6.42	3	7.21	4	3.7*
Helpful	9.57	12	8.33	6	7.24	5	2.8
Honest	6.26	2	4.28	1	5.09	1	4.6*
Imaginative	9.48	10	11.18	14	9.76	12	3.1*
Independent	7.57	5	9.39	8	7.73	6	3.2*
Intellectual	10.52	14	10.82	13	9.39	9	1.1
Logical	10.19	13	11.30	15	11.73	15	1.2
Loving	6.00	1	5.25	2	5.76	3	< 1
Obedient	16.50	18	14.81	18	16.15	18	5.4**
Polite	13.76	17	12.32	16	13.45	16	3.4*
Responsible	7.14	4	7.40	5	7.73	7	< 1
Self-controlled	10.74	15	10.43	12	10.97	14	< 1

* p < .05, ** p < .01.

instrumental values.

Before interpreting these value differences, two important considerations should be stated. First, moral development theory does not necessarily imply that individuals at the lower two levels will rank any particular value high or low. At levels I or II, values are thought to reflect the society's or the group's values, so that whatever the society or the group considers important should also be ranked highly by the level I or II subjects. It is only at level III, where values are self-chosen principles, that any particular values should necessarily be emphasized. Clearly, moral development theory predicts that equality would be ranked highest at level III since equality is a core principle of the post-conventional morality.

The second consideration involves the stage-level distinction in the moral development typology. Certain values, if responsive to the moral dimension, should be differentially ranked by subjects at adjacent moral stages. For example, salvation would probably be ranked higher by the stage-4 (rigid rule orientation) subjects than by the stage-3 ("good boy-nice girl") subjects. Since level II consolidates stages 3 and 4, this distinction is not visible in Table 14. Similarly, stage-1 (punishment and obedience) subjects should rank obedient higher than stage-2 (naive instrumental hedonism) subjects. However, in this sample of college students, the level I group which consolidates stages 1 and 2 does not contain any "pure" stage-1 subjects. For the reader interested in the value differences between moral stages, Tables 20 and 21 in Appendix 0 present the value means for the five moral stage groups. However, since this research focuses on levels of moral development, only Tables 14 and 15 will be discussed.

Among those values with significant (or nearly significant) F ratios,

four show a pattern of declining importance over the moral levels.

A comfortable life, national security, clean and pleasure ($p < .08$)

are ranked highest at level I and lowest at level III. Recalling that all level I subjects are stage-2 instrumental relativists, it is consistent with the Kohlberg typology that these subjects would emphasize the hedonic values pleasure and a comfortable life. The relative higher ranking of national security at level I may be consistent with level I's recognition of power as crucial to the resolution of moral problems.

However, it is more probable to have expected the level II moralists to have emphasized national security because of their presumed strong identification with the social structure and their desire to maintain that structure. It is likely, however, that at the time of this study (January, 1972) that the level II subjects were responding to the strong undercurrents of anti-war, anti-military sentiments engendered by the prolonged American involvement in the Indochina war.

The only value which shows a consistent level-to-level increase is helpful ($p < .07$). This is consistent with the increasing interpersonal concern which reaches its zenith at the post-conventional level III. Two other values, equality and a world at peace, stay constant at levels I and II and then increase sharply at level III. This increase in equality is precisely what moral development theory would predict because justice and equality are the core principles of the level III morality. A concomitant high ranking of a world at peace would also reflect these concerns.

A number of the values reveal either U-shaped patterns or inverted-U patterns across the moral levels. The two values which seem depressed at the middle (level II) are imaginative and independent. Both the

instrumental pre-conventional morality at level I and the self-chosen principles of level III strongly imply a sense of individual independence. The level II morality, with its emphasis of group identification, obviously would find independence less desirable than either level I or III moralities. Interestingly, the value freedom does not reflect this same pattern shown by independent. Freedom is ranked uniformly high at all three levels. However, this is also consistent with the Kohlberg typology since the values at level I and II most directly reflect cultural influences and freedom, perhaps more so than any other single value, is emphasized in the American culture.

The inverted-U pattern is found for the values forgiving, honest, obedient and polite. Forgiving and honest are valued least at level I, most at level II and intermediately at level III. Obedient and polite are also valued most at level II but levels I and III do not differ greatly from one another in their lower ranking of these values. Certainly, obedience, honesty and politeness are important aspects of being a "good boy," "good soldier," or "good citizen" in this culture and we would expect the conventional moralists at level II to emphasize them. Forgiving probably is reflecting the formal, conventional Christian emphasis of that value in America.²¹

One way of characterizing the content of the value system similarity observed at level III is to simply list those values which, on the average, are ranked consistently highest or lowest by the level III subjects relative to the other levels. Disregarding significance of

²¹But note in Table 20 (Appendix O) that forgiving is ranked highest on the average by the subjects at stage 6. At stage 6, forgiving is a true moral principle.

the F ratios, level III subjects have the highest average pretest and posttest ranking of the following values: (Terminal) a world at peace, equality, inner harmony, mature love, wisdom; (instrumental) broadminded, courageous, helpful and intellectual. The level III subjects have the lowest average ranking of: (Terminal) a comfortable life, happiness, national security, pleasure; (Instrumental) ambitious, cheerful, clean and logical. This listing provides some notion of the values which the post-conventional moralists tend to share and which distinguish the principled morality from the conventional and pre-conventional moralities.

Examination of these value differences reveals a pattern which is generally consistent with expectations derived from Kohlberg's scheme. However, it is not possible to say that the value patterns "prove" or "disprove" the moral development scheme since moral development theory does not predict any specific universal pattern of value choices. Value choices, at least at levels I and II, are intimately related to the individual's social environment and moral development theory speaks more directly to how these choices are made than to what choices are made.

Depending on one's theoretical biases, one may conclude either that moral levels do not predict values very well or that moral levels predict values surprisingly well. First, if value theory and moral development theory are viewed as overlapping to a considerable extent, then it is apparent that the range of value content found among these subjects is not greatly reduced when the moral dimension is added. Many of the values are not at all differentially ranked by subjects at the various moral levels. In contrast, if value theory is seen as a theory of value content and moral theory is seen as a theory of value structure, it is surprising that the subjects at the different moral levels evidence

as much value difference as they do. Structure would not be expected to perfectly predict content.

It is not our intent here to pit the two theories against one another since one focuses on content and the other focuses on structure. The more appropriate approach is to try to reconcile and integrate the two theoretical positions into a more harmonious global view of the nature of the valuing process. Neither theory is so well established that it could wholly replace the other and both theories have sufficient empirical support to warrant continued investigation.

Values, Attitudes and Moral Level

In looking for the correlates between moral development and values, we have thus far examined only value-to-value linkages. The structural characteristics of cognitive systems which affect these linkages are also thought to affect value-to-attitude linkages. Hypothesis 5 (page 60) suggests that the single value equality will be a better predictor of racial attitudes among subjects at moral level III because of the unitary nature of the level III cognitive systems.

A basic value theory assumption is that attitudes are some probabilistic function of value preferences. In particular, subject responses to the ninety racial attitude items of the multifactor racial attitude inventory should reflect each subject's equality ranking because the concept equality is implicated in every attitude item. Under the assumption of a single, unitary value system, an individual's racial attitude will be functions of a constant set of value weights. That is, a high value for equality vis-a-vis other values will result in racial attitudes highly favoring egalitarianism. A low value for

equality will result in racial attitudes favoring competing and more highly placed values. Under the assumption of a fragmented value system where values become more or less important as the situation varies, an individual's racial attitudes will be functions of a constantly changing set of value weights. That is, a high value for equality vis-a-vis all other values may not accurately represent the actual importance of equality in a particular attitude situation. Equality may be important for attitudes toward legal rights but may be unimportant for attitudes toward dating patterns.

The total racial attitude score for subjects represents the sum of ninety racial attitudes across a wide range of social, political, and business settings of varying generality. It is this complexity of attitudes which provides a test of the predictive power of the single value equality. Within level III, a subject's equality ranking is expected to be more uniformly weighted across all the racial attitudes. Thus, equality should better predict his total racial attitude score. Within levels I and II, a subject's equality ranking is expected to vary from attitude to attitude and thus equality will provide less information about the subject's total racial attitude score.

Table 16 shows that equality rank correlates .58 with the total racial attitude score among level III subjects. This same value-attitude correlation is only .24 among level I subjects and only .26 among level II subjects. Comparison of the level III correlation with the level I and level II correlations by Fisher's Z transformation reveals that .58 is significantly greater than either .24 ($z = 1.72$, $p < .05$) or .26 ($z = 2.03$, $p < .05$). In terms of explanatory power, equality accounts for more than 33 per cent of the variance in total attitude score among level III subjects

TABLE 16. Correlation between equality rank and total racial attitude score.

	Moral Level		
	I	II	III
r =	.24	.26	.58

while it accounts for less than 7 per cent among level I or level II subjects. Hypothesis 5 is thus confirmed.

Effects of Moral Level on Value Change

Chapter II set forth two partially contradictory expectations about the general effectiveness of the value-change treatment for subjects at the different moral levels. First, the principled moralists at level III are expected to change least due to their greater initial egalitarianism and greater value system stability. Second, level III moralists, to the extent that they possess contradictory values, are expected to change most due to their greater need for consistency.

The results to this point clearly support the expectation of less change among the level III subjects. The value equality is ranked significantly higher at the pretest by the level III subjects ($\bar{X}_{III} = 6.97$) than by the level I subjects ($\bar{X}_I = 9.07$, $t = 2.1$, $p < .05$) or the level II subjects ($\bar{X}_{II} = 9.17$, $t = 2.2$, $p < .05$). Similarly, the level III racial attitude score ($\bar{X}_{III} = 67.4$) is significantly higher than either the level I mean score ($\bar{X}_I = 61.0$, $t = 2.6$, $p < .05$) or the level II mean score ($\bar{X}_{II} = 60.7$, $t = 2.7$, $p < .05$). Level III subjects also report that they engage in equality-related behavior (e.g., tutoring minority students) more often than the subjects at the lower levels.²² Additionally, we have seen that level III value systems are more stable than value systems at the lower levels.

²²The percentage of subjects at levels I, II and III reporting that they engage in equality-related behaviors is 10.5%, 7.4% and 27.4% respectively. The Chi-square analysis of the frequency distribution is significant beyond the .01 level (Chi-square = 9.27, df = 2).

The clear implication of these findings is that level III subjects, as a group, are less likely to discover any motivating inconsistencies between values and self-conceptions because such inconsistencies are less frequent. Nevertheless, our second expectation (i.e., greater change among level III subjects with low initial value rankings) remains viable since some level III subjects do, in fact, rank equality or freedom relatively low. Testing this expectation, however, is difficult because there are so few level III subjects in each treatment group and fewer still who rank the target values low. Nonetheless, we may attempt to compare the responses of the subjects with low initial value ranking by pooling all the experimental treatments. Table 17 displays the mean equality and freedom changes for experimental and control subjects at each moral level who ranked either target value at or below the median at the pretest.

By pooling the experimental subjects in Table 17, the distinction between effective and ineffective value-change treatments is blurred and thus the differences between moral levels must be interpreted cautiously. Nevertheless, the means in Table 17 are quite suggestive. The level III moralists who ranked equality tenth or lower at the pretest show the greatest mean increase (3.50) in equality ranking. Although this finding does not approach statistical significance, it is in the expected direction. The results for freedom are even more interesting in that among those subjects who ranked freedom fifth or lower at the pretest, level III subjects changed the least (2.27) and level I subjects changed the most (4.83). The F ratio for the between-level comparisons of mean freedom-change is significant beyond the .20 level.

The directions of the differences in these mean changes for those

TABLE 17. Mean equality and freedom change scores for experimental and control subjects at each moral level who ranked each value at or below the median at the pretest.

	<u>Equality</u>				<u>Freedom</u>			
	<u>Exper.</u>		<u>Control</u>		<u>Exper.</u>		<u>Control</u>	
	(n)	mean change	(n)	mean change	(n)	mean change	(n)	mean change
Level I	(13)	2.23	(8)	2.13	(18)	4.83	(6)	1.33
Level II	(82)	1.78	(13)	1.46	(90)	2.99	(16)	1.13
Level III	(6)	3.50	(3)	.67	(11)	2.27	(4)	.50
<u>F</u> =		.61		.29		2.16*		.13

* $p < .20$. Note.-- Subjects from all four experimental groups are combined. Only those subjects who ranked equality 10th or lower or who ranked freedom 5th or lower at the pretest are included in this table.

subjects with low initial value rankings are suggestive of the role of self-conceptions in the value-change process. The morality of level I subjects reflects the paramount importance of their own relativistic, instrumental needs in dealing with their environment. Thus, when a level I subject discovers his own low ranking of freedom, he should discover a value/self-conception inconsistency of major importance. When he discovers his low equality ranking, he should discover a less compelling inconsistency because egalitarian considerations are not an important aspect of his self-conception.

At the other extreme, the morality of level III subjects reflects the paramount importance of universally-applied principles of justice and equality. Thus, when a level III subject discovers his own low ranking of equality, he should discover a value/self-conception inconsistency of major importance. When he discovers his low freedom ranking, the level III subject should discover an inconsistency which is much less compelling.

Thus, the direction of the means in Table 17 is consistent with value theory: The subjects change most that value which, if ranked low, reflects the most compelling value/self-conception inconsistency. For level I, that value is freedom. For level III, that value is equality. For the conventional moralists at level II, whose morality is less completely centered on either freedom or equality, neither value/self-conception inconsistency is quite as compelling as it is for level I or level III subjects. Of course, the nonsignificance of the F ratios in Table 17 make this interpretation most speculative. However, further research should consider the potentialities of the suggested differences.

As noted, Table 17 cannot address itself to questions of the

interactions between moral level and types of value-change procedure since all the experimental groups are pooled. Table 18, however, retains the treatment-group distinction and presents the mean equality and freedom change scores for all subjects regardless of initial value rank.²³ Analyses of variance across moral levels yield only one significant F ratio: in the Others' Feedback group, level I subjects apparently increased their freedom ranking considerably more so than either level II or level III subjects. The level I subjects increase their freedom ranking an average of 6.60 units while increases for levels II and III average 1.80 and 1.25 respectively. This level I freedom increase is coupled with an average decrease in equality of 2.80 units. Thus, the result of the OF treatment on level I moralists is to increase freedom and to decrease equality: a pattern of anti-egalitarian change rather than egalitarian change. It would seem that level I subjects, when confronted with information about their peers, tend to reinforce their self-centered morality.

In contrast, the OF subjects at level III increase their equality ranking the most and their freedom ranking the least, thereby reinforcing egalitarian self-conceptions. Table 18, taken as a whole, suggests that moral level is not implicated in the value-change process in any simple or direct manner. However, the scarcity of significant results in Table

²³ The mean raw-change scores are used in Table 18 since, due to initial value differences related to moral level, neither mean posttest-rank comparisons nor covariance analysis is appropriate. Also, an overall two-way (Treatment x Level) analysis of variance on raw-change scores is inappropriate since Treatment effects were examined earlier in the covariance analysis in Table 6. However, for historical purposes, the two-way ANOVA's on raw-change scores are preserved in Tables 22 and 23 in Appendix O.

TABLE 18. Mean Equality and Freedom change scores.

		Moral Level			F
		I	II	III	
CONTROL	(n)	(10)	(34)	(9)	
	Equality	.60	-.79	.11	.87
	Freedom	.70	.65	-.56	.60
SOF	(n)	(12)	(37)	(6)	
	Equality	1.42	1.49	1.17	.02
	Freedom	1.00	.84	.50	.04
OF	(n)	(5)	(41)	(8)	
	Equality	-2.80	.39	.88	1.59
	Freedom	6.60	1.80	1.25	5.15**
SF	(n)	(7)	(46)	(5)	
	Equality	.29	.13	.40	.02
	Freedom	-1.00	.57	-.60	.89
SOF/N	(n)	(8)	(45)	(5)	
	Equality	.63	.11	-.60	.26
	Freedom	-1.38	.73	1.00	1.61

** p < .01. Note.— Change is treatment-to-posttest (except pretest-to-posttest for OF group).

18 is ambiguous since the moral-group differences in initial value rank may be masking some interactions. Tables 17 and 18 together at least suggest that further research into these possible interactions may be potentially profitable.

Summary and Discussion

The results are clear that the values and value systems of college students are influenced by their developmental level of moral reasoning. Not only is the content of their values related to moral level but, more importantly, so are the structural characteristics of their value systems. As we move up the developmental scale, we find that value systems become increasingly more stable, increasingly more homogeneous, increasingly more integrated, and increasingly more predictive of attitudes. All these results confirm our speculation that value systems, no less than other cognitive components, are subject to the organizational influences found in cognitive development and cognitive functioning. These influences partly determine the structural characteristics of values and their interactions with other cognitive components.

The increased stability of values found at level III of moral development reflects the greater internalization and integration of value choices among individuals who have achieved a principled level of morality. The passage of this highest level encompasses a shift from external to internal sources of support for values. Values become more nearly self-chosen principles designed to facilitate the individual's social interaction. This reliance on self-chosen principles reduces the need to seek social approval for value choices and simultaneously reduces the influence of day-to-day social pressures. Although the

evidence concerning value change resulting from the experimental treatments is weak, it seems likely that the stability mitigates against short-swing changes in values among level III subjects while not interfering with long-term changes resulting from self-confrontation. In the future, where intervention techniques are aimed at values not importantly related to the moral dimension (e.g., cheerful), the effects of this greater stability may be even more important.

The relationship between value content and moral level has a number of important dimensions. First, the finding that values are shared more by subjects at the highest level is some evidence in support of Kohlberg's notion that there are fewer satisfactory values for postconventional moralists and that the higher stages do represent some goal toward which moral development is aimed. The value survey, however, reveals that even that group which has achieved the highest moral level is a markedly diverse group. Although the level III moralists are more like one another on the average, the range of value diversity is not less than the diversity found among the other levels as evidenced by the fact that the target values are ranked anywhere from first to last at all three levels.

Many of the value terms in the value survey are seemingly unrelated to the developmental dimension. Thus, while there is overlap between the value and moral development concepts, the value concept supplies information about subjects far beyond that supplied by moral development. However, the fact that the content of values extends beyond the content boundaries of moral development does not suggest that these values are wholly untouched. It is the structural properties of the moral development dimension which are the potentially most useful for

value theory. The operationalization of the value concept into two rank-order scales, while admirable for its simplicity and ease of administration, pays for this simplicity by forcing structurally diverse individuals into the same mold, thereby distorting the value systems of some.

Kohlberg's moral development theory provides only one approach to measuring the structural properties of cognitive systems and in retrospect this approach may not have been optimal for our experiment. Since the moral levels represent both structural and value content differences, the effects of structural difference on value change are confounded by the value content differences. Perhaps it would have been more advantageous to utilize a more "value-free" measure of cognitive structure which was not so intimately related to the target values. However, moral theory suggests that the correlation between value structure and value content is inherent in the human organism and efforts to consider one apart from the other distort the distinctively human nature of values.

In addition to the other value-moral development relationships reported, there seems to be an "activation" relationship. The effect of equality and moral development on racial attitudes is a case in point. Table 19 displays the mean pretest racial attitude scores for subjects at the three moral levels separated according to initial equality ranking (high, medium, or low). Since both the main effects for equality and moral level have been documented, the analyses in Table 19 allow us to compare racial attitudes related to moral levels for subjects essentially equated for equality ranking. Table 19 shows that there are no significant differences between the racial attitudes

TABLE 19. Comparison of racial attitudes among moral levels for subjects who rank equality high, medium, and low.

		Moral Level				
		I	II	III	F	
<u>Equality Rank</u>	High (1-6)	(n)	(16)	(66)	(17)	7.10*
		mean	60.81	63.08	72.12	
	Medium (7-12)	(n)	(14)	(84)	(11)	1.88
		mean	67.07	61.76	66.00	
	Low (13-18)	(n)	(12)	(54)	(5)	.09
		mean	54.33	55.96	54.60	

* $p < .05$.

of subjects at the various moral levels when these subjects rank equality either medium or low in importance. However, for those subjects who rank equality in the upper one-third of their values, it is the level III subjects who have the most egalitarian racial attitudes. While it is clear that both equality rank and moral level separately affect racial attitudes, it is the combination of a high equality ranking and a principled level III morality which yields an unusually egalitarian attitude. This suggests that the value equality is "activated" in the context of a principled morality.

The failure of the moral levels to shed much light on the differential effectiveness of the value modification procedures or to predict value change should not be taken to suggest that no relationships exist. On the contrary, the results revealing structural variation in value systems related to the cognitive-moral dimension continue to suggest that particular value change strategies will be more or less successful for individuals at the various levels.

Even more importantly, it seems likely that there may be qualitatively different types of value change related to moral levels. For example, the preconventional morality of level I, with its deference to authority and its instrumental approach to human problems, suggests that value change among level I individuals might often involve a process similar to the process of opinion change identified by Kelman (1961) as compliance. A compliance-type value change would be based on the subject's concern for the social effect of his values and maintenance of the value change would be dependent on a particular set of social conditions and external demands. Thus, the change would be short-lived or observable only in the change agent's presence.

A second type of value change derived from Kelman's analysis (identification) seems to reflect the type of change which may occur among conventional level II moralists. The values of level II moralists are dependent on their identification with some social group and this concern for social anchorage is the basis for inducing change in Kelman's identification process. We would expect that value change among level II moralists would be most easily induced by utilizing social expectations. However, maintenance of the changes would depend in part on maintaining the subject's satisfying role relations.

The third of Kelman's processes, internalization, seems to suggest the type of value change which occurs among the level III moralists. Value change here occurs only when there is appropriate concern by the individual for his own self-chosen principles rather than mere concern for his social position. Value changes involving this internalization process would be the most difficult to induce yet they would be the most long-lasting changes and they would be expected to manifest themselves in the whole range of behavior.

This research unfortunately has not provided an ideal test of either the different antecedents to change or of the different consequences of qualitatively different types of change. However, it is possible to conceptually transpose Kelman's three types of opinion-change processes into a description of individual types of value-change processes which overlay the three levels of moral reasoning. That is, the three moral levels identify types of cognitive systems in which values are embedded and the three Kelman processes describe the corresponding processes by which individuals at each moral level modify their values. With this transposition, it may be seen that value modification efforts should be

more successful if they are able to utilize external procedures matched to the internal processing capabilities of the subjects. At the same time, however, one would recognize that the outcomes of the various change procedures would exhibit qualitative differences related to the level of reasoning already achieved by subjects. For example, an internalization value-change procedure would be most effective for level III subjects but less effective for level I subjects. A compliance-type value-change procedure, while most effective only for level I subjects, would not be effective in the same way since values and value systems are qualitatively different between moral levels.

This research has provided some limited information useful for further research on value change by identifying some of the structural value system differences related to differences in moral reasoning ability such as stability, homogeneity, integration, and the like. However, examination of the dynamics of value system change with a research paradigm which acknowledges these differences is still a goal for the future.

These speculations suggest that further research into the complex nature of the valuing process would be most useful for both theoretical and practical reasons. The theory of values, as we have seen, does not yet fully capture the complexity of individual differences in the structure of values. To deal effectively with these important differences, the theory should generate further hypotheses and research to test the limits of the valuing process.

In practical terms, the sociological view which considers social survival as a function of value patterns and moral functioning requires adequate methods for establishing appropriate childhood and adult value

patterns. Efforts to move a society towards any particular goal require effective methods of inducing appropriate changes in both the end desires and means of achieving these ends within the population. Value theory and value modification research can contribute considerable inputs into the practical decisions which must be made to effect such changes. As value theory grows in its understanding of the valuing process and value modification research extends its range of techniques, the practical choice problem will become more rationally solvable.

APPENDICES

APPENDIX A

Pretest session cover sheet

INFORMATION SHEET/WINTER 1972 SURVEY

Please keep this for reference

This study is part of a long-range, nation-wide study of human beliefs and values. Our overall concern is with the antecedents and consequences of important human beliefs and the processes of believing and valuing.

Participants in the study will meet in groups 3 times over the term, for a total of 3 hours. The tasks will involve responding to questionnaires, interpreting social conflict situations, and analyzing social prediction theories on the basis of their own experiences.

IMPORTANT NOTES:

1. There is no intent on our part to deceive or unwittingly manipulate any participant. The purposes of the study are (a) for us to learn from your beliefs and (b) for you to learn from your beliefs.
2. CONFIDENTIALITY: Everything done by you in the context of this study is strictly confidential. Access to any data or information is restricted to the professional project staff. Since it is necessary to contact participants about later sessions, we do ask for names. However, after all data has been collected and collated, all names will be removed from the data. Also, no information on any participant will be requested from any other source and none of our information will be available to anyone other than each participant having access to his or her own file.

Times for second and third sessions will be arranged and participants will be notified in advance. Since each person's contribution is useful only if he or she attends all 3 sessions, credit is awarded for total participation only. Individual arrangements may be made in the event of illness or serious conflict. Questions or requests should be directed to the project director or his staff:

Dan McLellan, project director
204D Olds Hall
355-3441 (office)
355-5688 (home)

This study is supported by a grant from the National Science Foundation; Milton Rokesch, Principal Investigator.

APPENDIX B

FORM D

Rokeach Value Survey

368

VALUE SURVEY

BIRTH DATE _____ SEX: MALE _____ FEMALE _____

CITY and STATE OF BIRTH _____

NAME (FILL IN ONLY IF REQUESTED) _____

APPENDIX B - continued

INSTRUCTIONS

On the next page are 18 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life. Each value is printed on a gummed label which can be easily peeled off and pasted in the boxes on the left-hand side of the page.

Study the list carefully and pick out the one value which is the most important for you. Peel it off and paste it in Box 1 on the left.

Then pick out the value which is second most important for you. Peel it off and paste it in Box 2. Then do the same for each of the remaining values. The value which is least important goes in Box 18.

Work slowly and think carefully. If you change your mind, feel free to change your answers. The labels peel off easily and can be moved from place to place. The end result should truly show how you really feel.

APPENDIX B - continued

1		A COMFORTABLE LIFE (a prosperous life)
2		AN EXCITING LIFE (a stimulating, active life)
3		A SENSE OF ACCOMPLISHMENT (lasting contribution)
4		A WORLD AT PEACE (free of war and conflict)
5		A WORLD OF BEAUTY (beauty of nature and the arts)
6		EQUALITY (brotherhood, equal opportunity for all)
7		FAMILY SECURITY (taking care of loved ones)
8		FREEDOM (independence, free choice)
9		HAPPINESS (contentedness)
10		INNER HARMONY (freedom from inner conflict)
11		MATURE LOVE (sexual and spiritual intimacy)
12		NATIONAL SECURITY (protection from attack)
13		PLEASURE (an enjoyable, leisurely life)
14		SALVATION (saved, eternal life)
15		SELF-RESPECT (self-esteem)
16		SOCIAL RECOGNITION (respect, admiration)
17		TRUE FRIENDSHIP (close companionship)
18		WISDOM (a mature understanding of life)

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE.

APPENDIX B - concluded

Below is another list of 18 values. Arrange them in order of importance, the same as before.

1		AMBITIOUS (hard-working, aspiring)
2		BROADMINDED (open-minded)
3		CAPABLE (competent, effective)
4		CHEERFUL (lighthearted, joyful)
5		CLEAN (neat, tidy)
6		COURAGEOUS (standing up for your beliefs)
7		FORGIVING (willing to pardon others)
8		HELPFUL (working for the welfare of others)
9		HONEST (sincere, truthful)
10		IMAGINATIVE (daring, creative)
11		INDEPENDENT (self-reliant, self-sufficient)
12		INTELLECTUAL (intelligent, reflective)
13		LOGICAL (consistent, rational)
14		LOVING (affectionate, tender)
15		OBEDIENT (dutiful, respectful)
16		POLITE (courteous, well-mannered)
17		RESPONSIBLE (dependable, reliable)
18		SELF-CONTROLLED (restrained, self-disciplined)

APPENDIX C

Multifactor racial attitude inventory

OPINION INVENTORY

Form C-3

Here are some questions we are asking students in different parts of the United States. Please give your own opinion.

PLEASE DO NOT WRITE IN THIS BOOKLET.

This booklet contains numbered statements. Read each statement carefully. If you agree with it more than you disagree, check under "A" (agree) on the answer sheet. If you disagree with it more than you agree, check under "D" (disagree).

Do not leave any blanks. Please answer every statement.

Be sure that the number of the statement agrees with the number on your answer sheet.

Now turn the page and go ahead. Work fast.

APPENDIX C - continued

-2-

DO NOT MAKE ANY MARKS ON THIS BOOKLET

1. The Negro should be accorded equal rights through integration.
2. I would have no worries about going to a party with an attractive Negro date.
3. I would accept an invitation to a New Year's Eve party given by a Negro couple in their own home.
4. There is nothing to the idea that the Negro's troubles in the past have built in him a stronger character than the white man has.
5. I think it is right that the colored race should occupy a somewhat lower position socially than the white race.
6. A hotel owner ought to have the right to decide for himself whether he is going to rent rooms to Negro guests.
7. The Negro and the white man are inherently equal.
8. There should be a strictly enforced law requiring restaurant owners to serve persons regardless of race, creed or color.
9. Negroes sometimes imagine they have been discriminated against on the basis of color even when they have been treated quite fairly.
10. If I were a teacher, I would not mind at all taking advice from a Negro principal.
11. In a local community or campus charity drive I would rather not be represented by a Negro chairman even if he or she were qualified for the job.
12. Society has a moral right to insist that a community desegregate even if it doesn't want to.
13. Gradual desegregation is a mistake because it just gives people a chance to cause further delay.
14. School officials should not try placing Negro and white children in the same schools because of the danger of fights and other problems.
15. I probably would feel somewhat self-conscious dancing with a Negro in a public place.
16. The people of each state should be allowed to decide for or against integration in state matters.
17. It is better to work gradually toward integration than to try to bring it about all at once.
18. I think that Negroes have a kind of quiet courage which few white people have.
19. I would not take a Negro to eat with me in a restaurant where I was well known.
20. Some Negroes are so touchy about getting their rights that it is difficult to get along with them.

GO ON TO THE NEXT PAGE

C

APPENDIX C - continued

-3-

21. A person should not have the right to run a business in this country if he will not serve Negroes.
22. I would rather not have Negroes swim in the same pool as I do.
23. Civil Rights workers should be supported in their efforts to force acceptance of desegregation.
24. Those who advise patience and "slow down" in a desegregation are wrong.
25. I favor gradual rather than sudden changes in the social relations between Negroes and whites.
26. I can easily imagine myself falling in love with and marrying a Negro.
27. Suffering and trouble have made Negroes better able to withstand the stresses and strains of modern life than most whites.
28. I believe that the Negro is entitled to the same social privileges as the white man.
29. I am willing to have Negroes as close personal friends.
30. There is no basis in fact for the idea that Negroes withstand misfortune more courageously than do most whites.
31. We should not integrate schools until the Negro raises his standards of living.
32. Many Negroes should receive better education than they are now getting, but the emphasis should be on training them for jobs rather than preparing them for college.
33. Barbers and beauticians have the right to refuse service to anyone they please, even if it means refusing Negroes.
34. Although social equality of the races may be the democratic way, a good many Negroes are not yet ready to practice the self-control that goes with it.
35. If I were being interviewed for a job, I would not mind at all being evaluated by a Negro personnel director.
36. It would be a mistake ever to have Negroes for foremen and leaders over whites.
37. Many Negroes spend money for big cars and television sets instead of spending it for better housing.
38. I would feel somewhat uneasy talking about intermarriage with Negroes whom I do not know well.
39. Integration will result in greater understanding between Negroes and whites.
40. Since we live in a democracy, if we don't want integration it should not be forced upon us.

GO ON TO THE NEXT PAGE

APPENDIX C -continued

-4-

41. I would not mind at all if my only friends were Negroes.
42. There should be a law requiring persons who take roomers in their homes to rent to anyone regardless of race, creed or color.
43. In fields where they have been given an opportunity to advance, Negroes have shown that they are good sports and gentlemen.
44. I would willingly go to a competent Negro dentist.
45. It is not right to ask Americans to accept integration if they honestly don't believe in it.
46. I feel that moderation will do more for desegregation than the efforts of civil rights workers to force it immediately on people.
47. Negroes should be given every opportunity to get ahead, but they could never be capable of holding top leadership positions in this country.
48. If a Negro is qualified for an executive job, he should get it, even if it means that he will be supervising highly educated white persons.
49. If I were eating lunch in a restaurant alone with a Negro, I would be less self-conscious if the Negro were of the same sex as I rather than the opposite sex.
50. Even if there were complete equality of opportunity tomorrow, it would still take a long time for Negroes to show themselves equal to whites in some areas of life.
51. Integration of the schools will be beneficial to both white and Negro children alike.
52. There is no reason to believe that what Negroes have suffered in the past has made them a more noble people than are whites.
53. I would rather not have Negroes as dinner guests with most of my white friends.
54. I think that Negroes have a sense of dignity that you see in few white people.
55. If I were a business man, I would resent it if I were told that I had to serve Negroes.
56. Local communities should have no right to delay the desegregation of their community facilities.
57. In the long run desegregation would go more smoothly if we put it into effect immediately.
58. Integration should not be attempted because of the turmoil it causes.
59. Even if Negroes are given the opportunity for college education it will be several generations before they are ready to take advantage of it.
60. The fact that Negroes are human beings can be recognized without raising them to the social level of whites.

GO ON TO THE NEXT PAGE

APPENDIX C - continued

-5-

61. There is nothing to the idea that Negroes have more sympathy for other minorities than most whites do.
62. I have no objection to attending the movies or a play in the company of a Negro couple.
63. The inability of the Negroes to develop outstanding leaders restricts them to a low place in society.
64. Integration is more trouble than it is worth.
65. It doesn't work to force desegregation on a community before it is ready for it.
66. The history of the Negro in America shows that the process of gradual integration of the races is much too slow.
67. If desegregation is pushed too fast the Negro's cause will be hurt rather than helped.
68. Real estate agents should be required to show homes to Negro buyers regardless of the desires of home owners.
69. If I were a landlord, I would want to pick my own tenants even if this meant renting only to whites.
70. Even though Negroes may have some cause for complaint, they would get what they want faster if they were a bit more patient about it.
71. I feel in sympathy with responsible Negroes who are fighting for desegregation.
72. Most Negroes really think and feel the same way most whites do.
73. In this day of rush and hurry, the Negro has met the problems of society in a much calmer manner than the white man.
74. Before I sponsored a Negro for membership in an all white club, I would think a lot about how this would make the other members feel toward me.
75. If I were invited to be a guest of a mixed Negro and white group on a weekend pleasure trip, I would probably not go.
76. If the Negroes were of the same social class level as I am, I'd just as soon move into a colored neighborhood as a white one.
77. I would rather not serve on the staff of a Negro congressman.
78. The problem of racial prejudice has been greatly exaggerated by a few Negro agitators.
79. If he were qualified I would be willing to vote for a Negro for Congress from my district.
80. Many favor a more moderate policy, but I believe that Negroes should be encouraged to picket and sit in at places where they are not treated fairly.

GO ON TO THE NEXT PAGE

APPENDIX C - concluded

-6-

81. Desegregation laws often violate the rights of the individual who does not want to associate with Negroes.
82. There is no basis in fact for the idea that the Negro's misfortunes have made him a more understanding person than the average white.
83. Since segregation has been declared illegal, we should integrate schools.
84. I'd be quite willing to consult a Negro lawyer.
85. I would rather not have Negroes live in the same apartment building I live in.
86. I would be willing to introduce Negro visitors to friends and neighbors in my home town.
87. The Negro's own experience with unfair treatment has given him a sensitivity and understanding that will make him an excellent supervisor of white people.
88. The best way to integrate the schools is to do it all at once.
89. People who don't have to live with problems of race relations have no right to dictate to those who do.
90. If I were working on a community or campus problem with somebody, I would rather it not be a Negro.
91. When I see a Negro person and a white person together as a couple, I'm inclined to be more curious about their relationship than if they were both Negro or both white.
92. It is a good idea to have separate schools for Negroes and whites.
93. Race discrimination is not just a local community's problem but one which often demands action from those outside the community.
94. I have as much respect for some Negroes as I do for some white persons, but the average Negro and I share little in common.
95. It makes no difference to me whether I'm Negro or white.
96. Regardless of his own views, an employer should be required to hire workers without regard to race.
97. Although social mixing of the races may be right in principle, it is impractical until Negroes learn to accept more "don'ts" in the relations between teenage boys and girls.
98. I could trust a Negro person as easily as I could trust a white person if I know him well enough.
99. School integration should begin with the first few grades rather than all grades at once.
100. If I were a Negro, I would not want to gain entry into places where I was not really wanted.

APPENDIX D

Kohlberg moral judgment interview

INSTRUCTIONS FOR DECISION SITUATIONS

The purpose for these situations and questions is to better understand how people make decisions in social conflict situations. Read each situation and answer the questions in as much detail as possible. Please write down all the ideas or feelings that come to mind rather than giving just "yes" or "no" answers.

Remember, in answering the questions, we are most interested in THE REASONS WHY you feel or think the way you do about the issues.

NOTE: There is a blank sheet at the end of each situation. If you run out of room on any question continue your answer on that blank sheet.

SITUATION A (part 1)

So Heinz got desperate and broke into the man's store to steal the drug for his wife.

- Answer the next two* questions only if you think he SHOULD steal the drug.

- *4. If the husband does not feel very close or affectionate to his wife, should he still steal the drug?

APPENDIX D - continued

A-2

- *5. Suppose it wasn't Heinz's wife who was dying of cancer but it was Heinz's best friend. His friend didn't have any money and there was no one in his family willing to steal the drug. Should Heinz steal the drug for his friend in that case? WHY?

Answer the next two⁺ questions only if you think Heinz should NOT steal the drug.

- ⁺6. Would you steal the drug to save your wife's life?

- ⁺7. If you were dying of cancer but were strong enough, would you steal the drug to save your own life?

Everyone should answer this question.

8. Heinz broke in the store and stole the drug and gave it to his wife. He was caught and brought before the judge. Should the judge send Heinz to jail for stealing, or should he let him go free? WHY?

APPENDIX D - continued

SITUATION A (part 2)

222
 223
 224

The drug didn't work, and there was no other treatment known to medicine which could save Heinz's wife, so the doctor knew that she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer like ether or morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough ether to kill her. She said she could not stand the pain and that she was going to die in a few months anyway.

-
7. Should the doctor do what she asks and give her the drug that will make her die? WHY?

8. When a pet animal is badly wounded and will die, it is killed to put it out of its pain. Does the same thing apply here? WHY?

The next three* questions apply only if you think the doctor should NOT give her the drug.

- *9. Would you blame the doctor for giving her the drug?

- *10. What would have been best for the woman herself, to have had her live for six months more in great pain or have died sooner? WHY?

APPENDIX D - continued

A-3

- *11. Some countries have a law that doctors could put away a suffering person who will die anyway. Should the doctor do it in that case?

Everyone should answer the remaining questions.

12. The doctor finally decided to kill the woman to put her out of her pain so he did it without consulting the law. The police found out and the doctor was brought up on the charge of murder. The jury decided he had done it, so they found him guilty of murder even though they knew the woman had asked him. What punishment should the judge give the doctor? WHY?
13. Would it be right or wrong to give the doctor the death sentence? WHY?
14. Do you believe that the death sentence should be given in some cases? WHY?
15. The law prescribes the death penalty for treason against the country. Do you think the death sentence should be given for treason? WHY?

APPENDIX D - continued

SITUATION B

Joe is a 14-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the \$80 it cost to go to camp and a little more besides. But just before camp was going to start, his father changed his mind. Some of his friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money he had saved from the paper route. Joe didn't want to give up going to camp, so he thought of refusing to give his father the money.

1. Should Joe refuse to give his father the money? WHY?

2. Does his father have the right to tell Joe to give him the money?

3. Does giving the money have anything to do with being a good son?

4. Which is worse, a father breaking a promise to his son or a son breaking a promise to his father?

5. Why should a promise be kept?

1. If you had to say who did worse, would you say Al did worse to break in the store and steal the \$500 or Joe did worse to borrow the \$500 with no intention of paying it back? WHY?
2. Would you feel like a worse person stealing like Al or cheating like Joe?
3. Why shouldn't someone steal from a store anyhow?
4. Who would feel worse, the storeowner who was robbed or the man who was cheated out of the loan? WHY?
5. Which should the law be more harsh or strong against, stealing like Al or cheating like Joe? WHY?

MICHIGAN STATE UNIVERSITY

Department of Psychology

NOTICE OF SECOND SESSION
VALUES/BELIEF STUDY
Winter 1972

Dear Participant,

As you will recall, you took part in the first session of this study one night during the week of January 10-14. You and the 340 other students who took part are to be commended for your thoughtful cooperation during that lengthy and somewhat tedious first session.

As promised, the second session scheduled for next week will be shorter (about 45 minutes) and more interesting. We will be able to feed back some of your first-session responses and use these as a basis for your evaluation of some of our ideas. We think that you will find this session both interesting and worthwhile.

I realize that it is a burden to keep coming out on these cold nights, but your cooperation thus far has been enormously worthwhile and your continued help is crucial to the ultimate worth of this study.

We would like you to come to the second session at the time and place circled below.

Monday Tuesday Wednesday Thursday

6:45 p.m. 7:45 p.m.

316 Bessey Hall 317 Bessey Hall 111 Olds Hall

We asked during the first session to indicate nights you would be free (some people came later and missed this) and we have attempted to schedule you on one of your free nights. However, there is nothing sacred about this scheduling, so if you are unable to attend on this night, please call 355-3441 (Dr. Rokeach's office) or 355-5888 (Dan McLellan) and make alternate arrangements with whoever answers. Or, stop by 204C Olds Hall if you're close by.

At any rate, we look forward to your return.

Dan McLellan
Study Director

Please keep this letter for reference.

APPENDIX F

Self & Others' Feedback (SOF) treatment booklet

VALUE SURVEY - PART I

Name _____

This is a continuation of the scientific survey of value systems. Again, there are no right or wrong answers in this study. The best answer is your own personal opinion.

These questionnaires are intended not only to gather new scientific facts, but also to serve as a teaching device. In return for your cooperation, we hope to provide you with some interesting insights into yourself.

Below is a list of 18 values arranged in alphabetical order. These are some of the same values you arranged at the first session. We are interested in your telling us again the relative importance of these values for you.

Study the list carefully. Then place a 1 next to the value which is most important to you; place a 2 next to the value which is second most important; etc. The value which is least important should be ranked 18.

When you have completed ranking all of the values, go back and check over the list. Feel free to make changes. Please take all the time you need to think about this, so that the end result truly represents your values.

- _____ A COMFORTABLE LIFE (a prosperous life)
- _____ AN EXCITING LIFE (a stimulating, active life)
- _____ A SENSE OF ACCOMPLISHMENT (lasting contribution)
- _____ A WORLD AT PEACE (free of war and conflict)
- _____ A WORLD OF BEAUTY (beauty of nature and the arts)
- _____ EQUALITY (brotherhood, equal opportunity for all)
- _____ FAMILY SECURITY (taking care of loved ones)
- _____ FREEDOM (independence, free choice)
- _____ HAPPINESS (contentedness)
- _____ INNER HARMONY (freedom from inner conflict)
- _____ MATURE LOVE (sexual and spiritual intimacy)
- _____ NATIONAL SECURITY (protection from attack)
- _____ PLEASURE (an enjoyable, leisurely life)
- _____ SALVATION (saved, eternal life)
- _____ SELF-RESPECT (self-esteem)
- _____ SOCIAL RECOGNITION (respect, admiration)
- _____ TRUE FRIENDSHIP (close companionship)
- _____ WISDOM (a mature understanding of life)

When you finish this page, go right on to the next page.

APPENDIX F - continued

Now we are interested in knowing how you feel about the way you ranked these 18 values in general. Please circle one number on the following scale:

1	2	3	4	5	6	7	8	9
I care very								It does not
much about								make much
the order in								difference
which I ranked								which order
these values.								I put them in.

Below you will find the same 18 values listed again. This time, rank them in the order you think MSU students on the average would rank them.

- ___ A COMFORTABLE LIFE (a prosperous life)
- ___ AN EXCITING LIFE (a stimulating, active life)
- ___ A SENSE OF ACCOMPLISHMENT (lasting contribution)
- ___ A WORLD AT PEACE (free of war and conflict)
- ___ A WORLD OF BEAUTY (beauty of nature and the arts)
- ___ EQUALITY (brotherhood, equal opportunity for all)
- ___ FAMILY SECURITY (taking care of loved ones)
- ___ FREEDOM (independence, free choice)
- ___ HAPPINESS (contentedness)
- ___ INNER HARMONY (freedom from inner conflict)
- ___ MATURE LOVE (sexual and spiritual intimacy)
- ___ NATIONAL SECURITY (protection from attack)
- ___ PLEASURE (an enjoyable, leisurely life)
- ___ SALVATION (saved, eternal life)
- ___ SELF-RESPECT (self-esteem)
- ___ SOCIAL RECOGNITION (respect, admiration)
- ___ TRUE FRIENDSHIP (close companionship)
- ___ WISDOM (a mature understanding of life)

You have now completed Part 1 of the Value Survey.

When you finish this page, go right on to the next page.

APPENDIX F - continued

Name _____

VALUE SURVEY - PART II

Now copy your answers from the value scale on Page 1 (your own value rankings) onto this page.

MY OWN VALUE SYSTEM

- _____ A COMFORTABLE LIFE
- _____ AN EXCITING LIFE
- _____ A SENSE OF ACCOMPLISHMENT
- _____ A WORLD AT PEACE
- _____ A WORLD OF BEAUTY
- _____ EQUALITY
- _____ FAMILY SECURITY
- _____ FREEDOM
- _____ HAPPINESS
- _____ INNER HARMONY
- _____ MATURE LOVE
- _____ NATIONAL SECURITY
- _____ PLEASURE
- _____ SALVATION
- _____ SELF-RESPECT
- _____ SOCIAL RECOGNITION
- _____ TRUE FRIENDSHIP
- _____ WISDOM

When you have finished this page:

- 1.) Hand in Part 1.
- 2.) Wait for further instructions. DO NOT GO ON TO THE NEXT PAGE.

APPENDIX F - continued

Now, I would like to tell you some things we have already found out about the value systems of Michigan State students from the first session. I am sure that many of you would like to know what they are.

As you will recall, the same value survey was completed by everyone at the first session. The responses of all 304 of you students were averaged together. The table below shows the results.

TABLE 1. RANK ORDER OF IMPORTANCE TO 304 MICHIGAN STATE STUDENTS

<u>15</u>	A COMFORTABLE LIFE
<u>12</u>	AN EXCITING LIFE
<u>9</u>	A SENSE OF ACCOMPLISHMENT
<u>8</u>	A WORLD AT PEACE
<u>13</u>	A WORLD OF BEAUTY
<u>10</u>	EQUALITY
<u>11</u>	FAMILY SECURITY
<u>2</u>	FREEDOM
<u>1</u>	HAPPINESS
<u>3</u>	INNER HARMONY
<u>4</u>	MATURE LOVE
<u>18</u>	NATIONAL SECURITY
<u>14</u>	PLEASURE
<u>17</u>	SALVATION
<u>7</u>	SOCIAL RECOGNITION
<u>16</u>	SELF-RESPECT
<u>5</u>	TRUE FRIENDSHIP
<u>6</u>	WISDOM

One of the most interesting findings shown in Table 1 is that you students, on the average, feel that Freedom is very important--it is ranked 2; but you felt that Equality was considerably less important--it is ranked 10. Apparently Michigan State students value Freedom far more highly than they value Equality. This suggests that MSU students in general are much more interested in their own freedom than they are in freedom for other people.

Feel free to spend a few minutes comparing your own rankings on the preceding page with those of all 304 students, shown in Table 1. After doing that, please stop and wait for further instructions. DO NOT GO ON TO THE NEXT PAGE.

APPENDIX F - continued

We have one other finding which we think is unusually interesting. In order to make this finding more meaningful and relevant to you personally, you should first answer honestly the following question on civil rights:

Are you sympathetic with aims of civil rights activists (e.g. to get equality in jobs or education)?

- ☐ Yes, and I have been personally active in these efforts.
☐ Yes, but I have not been active myself.
☐ No.

From the questions asked at the first session, it is possible to determine which students are sympathetic or not and which have been active or not in civil rights efforts. The 304 students were divided into three groups according to what they reported about themselves. Table 2 shows the average rankings of Freedom and Equality for each of these three groups.

TABLE 2. AVERAGE RANKING OF FREEDOM AND EQUALITY BY MSU STUDENTS FOR AND AGAINST CIVIL RIGHTS.

	For civil rights and active	For civil rights but not active	Against civil rights
FREEDOM	5	2	3
EQUALITY	3	11	15
DIFFERENCE	+2	- 9	-12

Notice in Table 2 that:

1. Pro- and anti-civil rights students all value Freedom relatively highly. Of 18 values all groups rank Freedom among the top five.
2. Students who are strongly for civil rights efforts value Equality rather highly--they ranked it 3rd; but those against civil rights place a much lower value on Equality--they ranked it 15th in importance. Those who are sympathetic but non-participants ranked Equality 11th.
3. The distance between Freedom and Equality is +2 for the strong civil rights group, -9 for the middle group, and -12 for the anti-civil rights group.

Apparently both Freedom and Equality are important to some people, while to others Freedom is very important but Equality is not.

This raises the question as to whether those who are against civil rights are really saying that they care a great deal about their own freedom but are indifferent to other people's freedom. Those who are for civil rights are perhaps really saying they not only want freedom for themselves, but for other people too. What do you think?

(Please circle one number)

1	2	3	4	5	6	7	8	9
I agree strongly with this interpretation.			I'm not sure			I disagree strongly with this interpretation.		

Before you go on to the last part of this questionnaire, please spend a few minutes comparing your own rankings from the first page with these results. Then go on to the next page.

APPENDIX F - continued

We would now be most interested to find out how you feel about this method we have used to teach you something about values

(circle one number)

1. How well did you understand the material we presented?

1	2	3	4	5	6	7	8	9
I understood it completely							I did not understand it at all	

2. Did you find it thought-provoking?

1	2	3	4	5	6	7	8	9
Extremely thought-provoking							Extremely boring	

3. Do you think this technique will lead you to do some more thinking about your own values?

1	2	3	4	5	6	7	8	9
Yes, very much							No, not at all	

4. Do you feel that your responses were in any way hypocritical?

1	2	3	4	5	6	7	8	9
Yes, very hypocritical							No, not at all hypocritical	

5. Right now, how satisfied do you feel about the way you have ranked the eighteen values?

1	2	3	4	5	6	7	8	9
Extremely satisfied							Extremely dissatisfied	

6. To what extent do you feel your time is being well spent by participation in this study?

1	2	3	4	5	6	7	8	9
I am wasting my time							It is very worthwhile	

GO RIGHT ON TO THE NEXT PAGE

APPENDIX F - concluded

Now look again for a moment at your own rankings on the first page. Which rankings do you now feel satisfied or dissatisfied with? Please indicate whether you now feel satisfied or dissatisfied for each one, by a check mark or an X.

I am satis- fied with my ranking of:	I am dis- satisfied with my ranking of:	
_____	_____	A COMFORTABLE LIFE
_____	_____	AN EXCITING LIFE
_____	_____	A SENSE OF ACCOMPLISHMENT
_____	_____	A WORLD AT PEACE
_____	_____	A WORLD OF BEAUTY
_____	_____	EQUALITY
_____	_____	FAMILY SECURITY
_____	_____	FREEDOM
_____	_____	HAPPINESS
_____	_____	INNER HARMONY
_____	_____	NATURE LOVE
_____	_____	NATIONAL SECURITY
_____	_____	PLEASURE
_____	_____	SALVATION
_____	_____	SELF-RESPECT
_____	_____	SOCIAL RECOGNITION
_____	_____	TRUE FRIENDSHIP
_____	_____	WISDOM

In your own opinion, do you think that the Michman State findings I have described to you are scientifically valid?

____ Yes ____ Don't know ____ No

In the space below, please explain why you answered the previous question the way you did if you can.

Do you have any other comments you wish to make about this study? Please comment in the space below. Remember, everything in this questionnaire is absolutely confidential, and to be used only for scientific purposes.

Thank you for your cooperation thus far. The final session will be held the week before finals week and we will contact you again about it. Also, we will sign experimental "credit cards" at the final session. Feedback on your own responses thus far will also be provided at the last session.

APPENDIX G

Self & Others' Feedback/No Interpretation (SOF/N) treatment booklet

VALUE SURVEY - PART I

Name _____

This is a continuation of the scientific survey of value systems. Again, there are no right or wrong answers in this study. The best answer is your own personal opinion.

These questionnaires are intended not only to gather new scientific facts, but also to serve as a teaching device. In return for your cooperation, we hope to provide you with some interesting insights into yourself.

Below is a list of 18 values arranged in alphabetical order. These are some of the same values you arranged at the first session. We are interested in your telling us again the relative importance of these values for you.

Study the list carefully. Then place a 1 next to the value which is most important to you; place a 2 next to the value which is second most important; etc. The value which is least important should be ranked 18.

When you have completed ranking all of the values, go back and check over the list. Feel free to make changes. Please take all the time you need to think about this, so that the end result truly represents your values.

- _____ A COMFORTABLE LIFE (a prosperous life)
- _____ AN EXCITING LIFE (a stimulating, active life)
- _____ A SENSE OF ACCOMPLISHMENT (lasting contribution)
- _____ A WORLD AT PEACE (free of war and conflict)
- _____ A WORLD OF BEAUTY (beauty of nature and the arts)
- _____ EQUALITY (brotherhood, equal opportunity for all)
- _____ FAMILY SECURITY (taking care of loved ones)
- _____ FREEDOM (independence, free choice)
- _____ HAPPINESS (contentedness)
- _____ INNER HARMONY (freedom from inner conflict)
- _____ MATURE LOVE (sexual and spiritual intimacy)
- _____ NATIONAL SECURITY (protection from attack)
- _____ PLEASURE (an enjoyable, leisurely life)
- _____ SALVATION (saved, eternal life)
- _____ SELF-RESPECT (self-esteem)
- _____ SOCIAL RECOGNITION (respect, admiration)
- _____ TRUE FRIENDSHIP (close companionship)
- _____ WISDOM (a mature understanding of life)

When you finish this page, go right on to the next page.

APPENDIX G - continued

Now we are interested in knowing how you feel about the way you ranked these 18 values in general. Please circle one number on the following scale:

1	2	3	4	5	6	7	8	9
I care very much about the order in which I ranked these values.								
					It does not make much difference which order I put them in.			

Below you will find the same 18 values listed again. This time, rank them in the order you think MSU students on the average would rank them.

- ___ A COMFORTABLE LIFE (a prosperous life)
- ___ AN EXCITING LIFE (a stimulating, active life)
- ___ A SENSE OF ACCOMPLISHMENT (lasting contribution)
- ___ A WORLD AT PEACE (free of war and conflict)
- ___ A WORLD OF BEAUTY (beauty of nature and the arts)
- ___ EQUALITY (brotherhood, equal opportunity for all)
- ___ FAMILY SECURITY (taking care of loved ones)
- ___ FREEDOM (independence, free choice)
- ___ HAPPINESS (contentedness)
- ___ INNER HARMONY (freedom from inner conflict)
- ___ MATURE LOVE (sexual and spiritual intimacy)
- ___ NATIONAL SECURITY (protection from attack)
- ___ PLEASURE (an enjoyable, leisurely life)
- ___ SALVATION (saved, eternal life)
- ___ SELF-RESPECT (self-esteem)
- ___ SOCIAL RECOGNITION (respect, admiration)
- ___ TRUE FRIENDSHIP (close companionship)
- ___ WISDOM (a mature understanding of life)

You have now completed Part 1 of the Value Survey.

When you finish this page, go right on to the next page.

APPENDIX G - continued

Name _____

VALUE SURVEY - PART II

Now copy your answers from the value scale on Page 1 (your own value rankings) onto this page.

MY OWN VALUE SYSTEM

- ____ A COMFORTABLE LIFE
- ____ AN EXCITING LIFE
- ____ A SENSE OF ACCOMPLISHMENT
- ____ A WORLD AT PEACE
- ____ A WORLD OF BEAUTY
- ____ EQUALITY
- ____ FAMILY SECURITY
- ____ FREEDOM
- ____ HAPPINESS
- ____ INNER HARMONY
- ____ MATURE LOVE
- ____ NATIONAL SECURITY
- ____ PLEASURE
- ____ SALVATION
- ____ SELF-RESPECT
- ____ SOCIAL RECOGNITION
- ____ TRUE FRIENDSHIP
- ____ WISDOM

When you have finished this page:

- 1.) Hand in Part 1.
- 2.) Wait for further instructions. DO NOT GO ON TO THE NEXT PAGE.

APPENDIX G - continued

Now, I would like to tell you some things we have already found out about the value systems of Michigan State students from the first session. I am sure that many of you would like to know what they are.

As you will recall, the same value survey was completed by everyone at the first session. The responses of all 304 of you students were averaged together. The table below shows the results.

TABLE 1. RANK ORDER OF IMPORTANCE TO 304 MICHIGAN STATE STUDENTS

<u>15</u>	A COMFORTABLE LIFE
<u>12</u>	AN EXCITING LIFE
<u>9</u>	A SENSE OF ACCOMPLISHMENT
<u>8</u>	A WORLD AT PEACE
<u>13</u>	A WORLD OF BEAUTY
<u>10</u>	EQUALITY
<u>11</u>	FAMILY SECURITY
<u>2</u>	FREEDOM
<u>1</u>	HAPPINESS
<u>3</u>	INNER HARMONY
<u>4</u>	MATURE LOVE
<u>18</u>	NATIONAL SECURITY
<u>14</u>	PLEASURE
<u>17</u>	SALVATION
<u>16</u>	SOCIAL RECOGNITION
<u>7</u>	SELF RESPECT
<u>5</u>	TRUE FRIENDSHIP
<u>6</u>	WISDOM

One interesting finding shown in Table 1 is that you students, on the average, feel that Freedom is very important--it is ranked 2; but you felt that Equality was considerably less important--it is ranked 10. What, if any, significance does this have? Briefly state why or why not you think this finding is significant:

Feel free to spend a few minutes comparing your own rankings on the preceding page with those of all 304 students, shown in Table 1. After doing that, please stop and wait for further instructions. DO NOT GO ON TO THE NEXT PAGE.

APPENDIX G - continued

We have one other finding we would like you to look at. In order to make this finding more meaningful and relevant to you personally, you should first answer honestly the following question on civil rights:

Are you sympathetic with the aims of civil rights activists (e. g. to get equality in jobs or education)?

- ☐ Yes, and I have been personally active in these efforts.
☐ Yes, but I have not been active myself.
☐ No.

From the questions asked at the first session, it is possible to determine which students are sympathetic or not and which have been active or not in civil rights efforts. The 304 students were divided into three groups according to what they reported about themselves. Table 2 shows the average rankings of Freedom and Equality for each of these three groups.

TABLE 2. AVERAGE RANKING OF FREEDOM AND EQUALITY BY MSU STUDENTS FOR AND AGAINST CIVIL RIGHTS.

	For civil rights and active	For civil rights but not active	Against civil rights
FREEDOM	5	2	3
EQUALITY	3	11	15
DIFFERENCE	+2	-9	-12

Notice in Table 2 that:

1. Pro- and anti-civil rights students all value Freedom relatively highly. Of 10 values all groups rank Freedom among the top five.
2. Students who are strongly for civil rights efforts value Equality rather highly--they ranked it 3rd; but those against civil rights place a much lower value on Equality--they ranked it 15th in importance. Those who are sympathetic but non-participants ranked Equality 11th.
3. The distance between Freedom and Equality is +2 for the strong civil rights group, -9 for the middle group, and -12 for the anti-civil rights group.

Again, we would like to know what, if any, significance you find in these differences. Briefly comment below:

Before you go on to the last part of this questionnaire, please spend a few minutes comparing your own rankings from the first page with these results. Then go on to the next page.

APPENDIX G - continued

We would now be most interested to find out how you feel about this method we have used to teach you something about values

(circle one number)

1. How well did you understand the material we presented?

1	2	3	4	5	6	7	8	9
I understood it completely								I did not understand it at all

2. Did you find it thought-provoking?

1	2	3	4	5	6	7	8	9
Extremely thought-provoking								Extremely boring

3. Do you think this technique will lead you to do some more thinking about your own values?

1	2	3	4	5	6	7	8	9
Yes, very much								No, not at all

4. Do you feel that your responses were in any way hypocritical?

1	2	3	4	5	6	7	8	9
Yes, very hypocritical								No, not at all hypocritical

5. Right now, how satisfied do you feel about the way you have ranked the eighteen values?

1	2	3	4	5	6	7	8	9
Extremely satisfied								Extremely dissatisfied

6. To what extent do you feel your time is being well spent by participation in this study?

1	2	3	4	5	6	7	8	9
I am wasting my time								It is very worthwhile

GO RIGHT ON TO THE NEXT PAGE

APPENDIX G - concluded

Now look again for a moment at your own rankings on the first page. Which rankings do you now feel satisfied or dissatisfied with? Please indicate whether you now feel satisfied or dissatisfied for each one, by a check mark or an X.

I am satisfied with my ranking of:	I am dissatisfied with my ranking of:	
_____	_____	A COMFORTABLE LIFE
_____	_____	AN EXCITING LIFE
_____	_____	A SENSE OF ACCOMPLISHMENT
_____	_____	A WORLD AT PEACE
_____	_____	A WORLD OF BEAUTY
_____	_____	EQUALITY
_____	_____	FAMILY SECURITY
_____	_____	FREEDOM
_____	_____	HAPPINESS
_____	_____	INNER HARMONY
_____	_____	MATURE LOVE
_____	_____	NATIONAL SECURITY
_____	_____	PLEASURE
_____	_____	SALVATION
_____	_____	SELF-RESPECT
_____	_____	SOCIAL RECOGNITION
_____	_____	TRUE FRIENDSHIP
_____	_____	WISDOM

In your own opinion, do you think that the Michigan State findings I have described to you are scientifically valid?

____ Yes ____ Don't know ____ No

In the space below, please explain why you answered the previous question the way you did if you can.

Do you have any other comments you wish to make about this study? Please comment in the space below. Remember, everything in this questionnaire is absolutely confidential, and to be used only for scientific purposes.

Thank you for your cooperation thus far. The final session will be held the week before finals week and we will contact you again about it. Also, we will sign experimental "credit cards" at the final session. Feedback on your own responses thus far will also be provided at the last session.

APPENDIX H

Self Feedback (SF) treatment booklet

VALUE SURVEY - PART I

Name _____

This is a continuation of the scientific survey of value systems. Again, there are no right or wrong answers in this study. The best answer is your own personal opinion.

These questionnaires are intended not only to gather new scientific facts, but also to serve as a teaching device. In return for your cooperation, we hope to provide you with some interesting insights into yourself.

Below is a list of 18 values arranged in alphabetical order. These are some of the same values you arranged at the first session. We are interested in your telling us again the relative importance of these values for you.

Study the list carefully. Then place a 1 next to the value which is most important to you; place a 2 next to the value which is second most important; etc. The value which is least important should be ranked 18.

When you have completed ranking all of the values, go back and check over the list. Feel free to make changes. Please take all the time you need to think about this, so that the end result truly represents your values.

- _____ A COMFORTABLE LIFE (a prosperous life)
- _____ AN EXCITING LIFE (a stimulating, active life)
- _____ A SENSE OF ACCOMPLISHMENT (lasting contribution)
- _____ A WORLD AT PEACE (free of war and conflict)
- _____ A WORLD OF BEAUTY (beauty of nature and the arts)
- _____ EQUALITY (brotherhood, equal opportunity for all)
- _____ FAMILY SECURITY (taking care of loved ones)
- _____ FREEDOM (independence, free choice)
- _____ HAPPINESS (contentedness)
- _____ INNER HARMONY (freedom from inner conflict)
- _____ MATURE LOVE (sexual and spiritual intimacy)
- _____ NATIONAL SECURITY (protection from attack)
- _____ PLEASURE (an enjoyable, leisurely life)
- _____ SALVATION (saved, eternal life)
- _____ SELF-RESPECT (self-esteem)
- _____ SOCIAL RECOGNITION (respect, admiration)
- _____ TRUE FRIENDSHIP (close companionship)
- _____ WISDOM (a mature understanding of life)

When you finish this page, go right on to the next page.

APPENDIX H - continued

Now we are interested in knowing how you feel about the way you ranked the 18 values in general. Please circle one number on the following scale:

1	2	3	4	5	6	7	8	9
I care very much about the order in which I ranked these values.								It does not make much difference which order I put them in.

When you finish, please wait until everyone is done. DO NOT GO ON TO THE NEXT PAGE.

Before you go on to the last part of this questionnaire, please spend a few minutes comparing your own ranking from the first page with this. Then go on to the next page.

APPENDIX H - continued

We would now be most interested to find out how you feel about this method we have used to teach you something about values

(circle one number)

1. How well did you understand the material we presented?

1	2	3	4	5	6	7	8	9
I understood it completely								I did not understand it at all

2. Did you find it thought-provoking?

1	2	3	4	5	6	7	8	9
Extremely thought-provoking								Extremely boring

3. Do you think this technique will lead you to do some more thinking about your own values?

1	2	3	4	5	6	7	8	9
Yes, very much								No, not at all

4. Do you feel that your responses were in any way hypocritical?

1	2	3	4	5	6	7	8	9
Yes, very hypocritical								No, not at all hypocritical

5. Right now, how satisfied do you feel about the way you have ranked the eighteen values?

1	2	3	4	5	6	7	8	9
Extremely satisfied								Extremely dissatisfied

6. To what extent do you feel your time is being well spent by participation in this study?

1	2	3	4	5	6	7	8	9
I am wasting my time								It is very worthwhile

GO RIGHT ON TO THE NEXT PAGE

APPENDIX H - concluded

Now look again for a moment at your own rankings on the first page. Which rankings do you now feel satisfied or dissatisfied with? Please indicate whether you now feel satisfied or dissatisfied for each one, by a check mark or an x.

I am satisfied with my ranking of:	I am dissatisfied with my ranking of:	
_____	_____	A COMFORTABLE LIFE
_____	_____	AN EXCITING LIFE
_____	_____	A SENSE OF ACCOMPLISHMENT
_____	_____	A WORLD AT PEACE
_____	_____	A WORLD OF BEAUTY
_____	_____	EQUALITY
_____	_____	FAMILY SECURITY
_____	_____	FREEDOM
_____	_____	HAPPINESS
_____	_____	INNER HARMONY
_____	_____	MATURE LOVE
_____	_____	NATIONAL SECURITY
_____	_____	PLEASURE
_____	_____	SALVATION
_____	_____	SELF-RESPECT
_____	_____	SOCIAL RECOGNITION
_____	_____	TRUE FRIENDSHIP
_____	_____	WISDOM

Do you have any comments you wish to make about this study? Please comment in the space below. Remember, everything in this questionnaire is absolutely confidential, and to be used only for scientific purposes.

Thank you for your cooperation thus far. The third and final session will be held prior to finals week. You will again be notified. Experimental "credit cards" will be signed at that session. Also, we will feedback some of your responses thus far so that you may look at them.

APPENDIX I

Others' Feedback (OF) treatment booklet

VALUE SURVEY - PART I

Name _____

This is a continuation of the scientific survey of value systems. Again, there are no right or wrong answers in this study. The best answer is your own personal opinion.

These questionnaires are intended not only to gather new scientific facts, but also to serve as a teaching device. In return for your cooperation, we hope to provide you with some interesting insights.

Below is a list of 18 values arranged in alphabetical order. You will recall that at the first session you ranked these values in order of importance to yourself. Your task now is to rank them in the order you think MSU students on the average would rank them.

Study the list carefully. Then place a 1 next to the value which you think most MSU students rank as most important for themselves. Place a 2 next to the value which you think MSU students rank second most important. The value you think MSU students rank least important should be ranked 18.

- _____ A COMFORTABLE LIFE (a prosperous life)
- _____ AN EXCITING LIFE (a stimulating, active life)
- _____ A SENSE OF ACCOMPLISHMENT (lasting contribution)
- _____ A WORLD AT PEACE (free of war and conflict)
- _____ A WORLD OF BEAUTY (beauty of nature and the arts)
- _____ EQUALITY (brotherhood, equal opportunity for all)
- _____ FAMILY SECURITY (taking care of loved ones)
- _____ FREEDOM (independence, free choice)
- _____ HAPPINESS (contentedness)
- _____ INNER HARMONY (freedom from inner conflict)
- _____ MATURE LOVE (sexual and spiritual intimacy)
- _____ NATIONAL SECURITY (protection from attack)
- _____ PLEASURE (an enjoyable, leisurely life)
- _____ SALVATION (saved, eternal life)
- _____ SELF-RESPECT (self-esteem)
- _____ SOCIAL RECOGNITION (respect, admiration)
- _____ TRUE FRIENDSHIP (close companionship)
- _____ WISDOM (a mature understanding of life)

APPENDIX I - continued

VALUE SURVEY - PART II

Name _____

When you have finished Part I:

- 1.) Hand in Part I.
- 2.) Wait for further instructions.
DO NOT GO ON TO THE NEXT PAGE.

APPENDIX I - continued

VALUE SURVEY - PART II

Now, I would like to tell you some things we have already found out about the value systems of Michigan State students from the first session. I am sure that many of you would like to know what they are.

As you will recall, the same value survey was completed by everyone at the first session. The responses of all 304 of you students were averaged together. The table below shows the results.

TABLE 1. RANK ORDER OF IMPORTANCE TO 304 MICHIGAN STATE STUDENTS

<u>15</u>	A COMFORTABLE LIFE
<u>12</u>	AN EXCITING LIFE
<u>9</u>	A SENSE OF ACCOMPLISHMENT
<u>8</u>	A WORLD AT PEACE
<u>13</u>	A WORLD OF BEAUTY
<u>10</u>	EQUALITY
<u>11</u>	FAMILY SECURITY
<u>2</u>	FREEDOM
<u>1</u>	HAPPINESS
<u>3</u>	INNER HARMONY
<u>4</u>	MATURE LOVE
<u>16</u>	NATIONAL SECURITY
<u>14</u>	PLEASURE
<u>17</u>	SALVATION
<u>7</u>	SOCIAL RECOGNITION
<u>16</u>	SELF-RESPECT
<u>5</u>	TRUE FRIENDSHIP
<u>6</u>	WISDOM

One of the most interesting findings shown in Table 1 is that you students, on the average, feel that Freedom is very important--it is ranked 2; but you felt that Equality was considerably less important--it is ranked 10. Apparently Michigan State students value Freedom far more highly than they value Equality. This suggests that MSU students in general are much more interested in their own freedom than they are in freedom for other people.

Feel free to spend a few minutes looking at these rankings. After doing that, please stop and wait for further instructions. DO NOT GO ON TO THE NEXT PAGE.

APPENDIX I - continued

We have one other finding which we think is unusually interesting. From the questions we asked at the first session, it is possible to determine how sympathetic each student was toward the aims of civil rights activists (e. g. to get equality in jobs or education). We also were able to determine which students were active in any civil rights efforts. The 304 students were divided into three groups according to what they reported about themselves. Table 2 shows the average rankings of Freedom and Equality for each of these three groups.

TABLE 2. AVERAGE RANKING OF FREEDOM AND EQUALITY BY MSU STUDENTS FOR AND AGAINST CIVIL RIGHTS.

	For civil rights and active	For civil rights but not active	Against civil rights
FREEDOM	5	2	3
EQUALITY	3	11	15
DIFFERENCE	+2	-9	-12

Notice in Table 2 that:

1. Pro- and anti-civil rights students all value Freedom relatively highly. Of 18 values all groups rank Freedom among the top five.
2. Students who are strongly for civil rights efforts value Equality rather highly--they ranked it 3rd; but those against civil rights place a much lower value on Equality--they ranked it 15th in importance. Those who are sympathetic but non-participants ranked Equality 11th.
3. The distance between Freedom and Equality is +2 for the strong civil rights group, -9 for the middle group, and -12 for the anti-civil rights group.

Apparently both Freedom and Equality are important to some people, while to others Freedom is very important but Equality is not.

This raises the question as to whether those who are against civil rights are really saying that they care a great deal about their own freedom but are indifferent to other people's freedom. Those who are for civil rights are perhaps really saying they not only want freedom for themselves, but for other people too. What do you think?

(Please circle one number)

1	2	3	4	5	6	7	8	9
I agree strongly with this interpretation				I'm not sure				I disagree strongly with this interpretation

APPENDIX I - concluded

We would now be most interested to find out how you feel about this method we have used to teach you something about values.

(Circle one number)

1. How well did you understand the material we presented?

1	2	3	4	5	6	7	8	9	
I understood it completely									I did not understand it at all

2. Did you find it thought-provoking?

1	2	3	4	5	6	7	8	9	
Extremely thought-provoking									Extremely boring

3. Do you think this technique will lead you to do some more thinking about your own values?

1	2	3	4	5	6	7	8	9	
Yes, very much									No, not at all

4. To what extent do you feel your time is being well spent by participating in this study?

1	2	3	4	5	6	7	8	9	
I am wasting my time									It is very worthwhile

In your own opinion, do you think that the Michigan State findings I have described to you are scientifically valid?

_____ Yes Don't Know _____ NO

In the space below, please explain why you answered the previous question the way you did, if you can.

Do you have any other comments you wish to make about this study? Please comment on the reverse side. Remember, everything in this questionnaire is absolutely confidential, and to be used only for scientific purposes.

Thank you for your cooperation thus far. The final session will be held the week before finals week and we will contact you again about it. Also, we will sign experimental "credit cards" at the final session. Feedback on your own responses thus far will also be provided at the last session.

APPENDIX J

Control treatment booklet

VALUE SURVEY - PART I

This is a continuation of the scientific survey of value systems. Again, there are no right or wrong answers in this study. The best answer is your own personal opinion.

Please read all the directions carefully so that you know what is asked of you. If you have any questions, please ask.

Below is a list of 18 values arranged in alphabetical order. These are some of the same values you arranged at the first session. We are interested in your telling us again the relative importance of these values for you.

Study the list carefully. Then place a 1 next to the value which is most important to you; place a 2 next to the value which is second most important; etc. The value which is least important should be ranked 18.

When you have completed ranking all of the values, go back and check over the list. Feel free to make changes. Please take all the time you need to think about this, so that the end result truly represents your values.

- _____ A COMFORTABLE LIFE (a prosperous life)
- _____ AN EXCITING LIFE (a stimulating, active life)
- _____ A SENSE OF ACCOMPLISHMENT (lasting contribution)
- _____ A WORLD AT PEACE (free of war and conflict)
- _____ A WORLD OF BEAUTY (beauty of nature and the arts)
- _____ EQUALITY (brotherhood, equal opportunity for all)
- _____ FAMILY SECURITY (taking care of loved ones)
- _____ FREEDOM (independence, free choice)
- _____ HAPPINESS (contentedness)
- _____ INNER HARMONY (freedom from inner conflict)
- _____ MATURE LOVE (sexual and spiritual intimacy)
- _____ NATIONAL SECURITY (protection from attack)
- _____ PLEASURE (an enjoyable, leisurely life)
- _____ SALVATION (saved, eternal life)
- _____ SELF-RESPECT (self-esteem)
- _____ SOCIAL RECOGNITION (respect, admiration)
- _____ TRUE FRIENDSHIP (close companionship)
- _____ WISDOM (a mature understanding of life)

When you finish this page, go right on to the next page.

APPENDIX J - continued

Now we are interested in knowing how you feel about the way you ranked these 18 values in general. Please circle one number on the following scale:

1	2	3	4	5	6	7	8	9
I care very much about the order in which I ranked these values.								It does not make much difference which order I put them in.

Below you will find the same 18 values listed again. This time, rank them in the order you think MSU students on the average would rank them.

- ___ A COMFORTABLE LIFE (a prosperous life)
- ___ AN EXCITING LIFE (a stimulating, active life)
- ___ A SENSE OF ACCOMPLISHMENT (lasting contribution)
- ___ A WORLD AT PEACE (free of war and conflict)
- ___ A WORLD OF BEAUTY (beauty of nature and the arts)
- ___ EQUALITY (brotherhood, equal opportunity for all)
- ___ FAMILY SECURITY (taking care of loved ones)
- ___ FREEDOM (independence, free choice)
- ___ HAPPINESS (contentedness)
- ___ INNER HARMONY (freedom from inner conflict)
- ___ MATURE LOVE (sexual and spiritual intimacy)
- ___ NATIONAL SECURITY (protection from attack)
- ___ PLEASURE (an enjoyable, leisurely life)
- ___ SALVATION (saved, eternal life)
- ___ SELF-RESPECT (self-esteem)
- ___ SOCIAL RECOGNITION (respect, admiration)
- ___ TRUE FRIENDSHIP (close companionship)
- ___ WISDOM (a mature understanding of life)

You have now completed Part 1 of the Value Survey.

When you finish this page, go right on to the next page.

APPENDIX J - continued

MORAL VALUES

This "moral values" questionnaire has been given to college students at regular intervals since the 1920's. Your task will be to respond to the questions on the basis of your own beliefs today. You will see that a couple of the questions are somewhat dated, but please answer them as best you can.

This questionnaire presents 50 acts or situations which you are to evaluate in terms of "rightness" or "wrongness" ranging from 1 to 9. Circle 1 if the item seems least wrong or not wrong at all, and 9 if it seems most wrong or "wrongest" possible. Use in-between numbers for in-between degrees of "wrongness." The higher the number, the more wrong it becomes.

-
- | | | |
|-------------------|---|--|
| 1 2 3 4 5 6 7 8 9 | : | Killing a person in defense of one's own life. |
| 1 2 3 4 5 6 7 8 9 | : | Kidnapping and holding a child for ransom. |
| 1 2 3 4 5 6 7 8 9 | : | Having sex relations while unmarried. |
| 1 2 3 4 5 6 7 8 9 | : | Forging a check. |
| 1 2 3 4 5 6 7 8 9 | : | Habitually failing to keep promises. |
| 1 2 3 4 5 6 7 8 9 | : | Girls smoking cigarettes. |
| 1 2 3 4 5 6 7 8 9 | : | An industry maintaining working conditions for its workers known to be detrimental to their health. |
| 1 2 3 4 5 6 7 8 9 | : | A doctor allowing a badly deformed baby to die when he could save its life but not cure its deformity. |
| 1 2 3 4 5 6 7 8 9 | : | A legislator, for a financial consideration, using his influence to secure the passage of a law known to be contrary to public interest. |
| 1 2 3 4 5 6 7 8 9 | : | Testifying falsely in court when under oath. |
| 1 2 3 4 5 6 7 8 9 | : | Betting on horse races. |
| 1 2 3 4 5 6 7 8 9 | : | A nation dealing unjustly with a weaker nation over which it has power. |
| 1 2 3 4 5 6 7 8 9 | : | A jury freeing a father who has killed a man for rape against his young daughter. |
| 1 2 3 4 5 6 7 8 9 | : | Living beyond one's means in order to possess luxuries enjoyed by friends and associates. |
| 1 2 3 4 5 6 7 8 9 | : | Bootlegging under prohibition law. |
| 1 2 3 4 5 6 7 8 9 | : | Having illicit sex relations after marriage. |
| 1 2 3 4 5 6 7 8 9 | : | Driving an automobile while drunk but without accident. |
| 1 2 3 4 5 6 7 8 9 | : | A prosperous industry paying workers less than a living wage. |
| 1 2 3 4 5 6 7 8 9 | : | Holding up and robbing a person. |
| 1 2 3 4 5 6 7 8 9 | : | Not giving to charity when able. |
| 1 2 3 4 5 6 7 8 9 | : | Not taking the trouble to vote at primaries and elections. |
| 1 2 3 4 5 6 7 8 9 | : | A strong commercial concern selling below cost to crowd out a weaker competitor. |
| 1 2 3 4 5 6 7 8 9 | : | Falsifying about a child's age to secure reduced fare. |
| 1 2 3 4 5 6 7 8 9 | : | A student who is allowed to grade his own paper reporting a higher grade than the one earned. |

APPENDIX J - continued

- 2 -

1 2 3 4 5 6 7 8 9 : Not giving to support religion when able.
 1 2 3 4 5 6 7 8 9 : Keeping over-change given by a clerk in mistake.
 1 2 3 4 5 6 7 8 9 : Copying from another's paper in a school examination.
 1 2 3 4 5 6 7 8 9 : Speeding away after one's car knocks down a pedestrian.
 1 2 3 4 5 6 7 8 9 : Charging interest above a fair rate when lending money.
 1 2 3 4 5 6 7 8 9 : Falsifying a federal income tax return.
 1 2 3 4 5 6 7 8 9 : Buying bootleg liquor under prohibition law.
 1 2 3 4 5 6 7 8 9 : Married persons using birth-control devices.
 1 2 3 4 5 6 7 8 9 : Seeking divorce because of incompatibility when both parties agree to separate (assuming no children).
 1 2 3 4 5 6 7 8 9 : Depositing more than one ballot in an election in order to aid a favorite candidate.
 1 2 3 4 5 6 7 8 9 : Living on inherited wealth without attempting to render service to others.
 1 2 3 4 5 6 7 8 9 : Taking one's own life (assuming no near relatives or dependents).
 1 2 3 4 5 6 7 8 9 : Using profane or blasphemous speech.
 1 2 3 4 5 6 7 8 9 : Being habitually cross or disagreeable to members of one's own family.
 1 2 3 4 5 6 7 8 9 : Seeking amusement on Sunday instead of going to church.
 1 2 3 4 5 6 7 8 9 : Refusing to bear arms in a war one believes to be unjust.
 1 2 3 4 5 6 7 8 9 : Advertising a medicine to cure a disease known to be incurable by such a remedy.
 1 2 3 4 5 6 7 8 9 : Misrepresenting the value of an investment in order to induce credulous persons to invest.
 1 2 3 4 5 6 7 8 9 : Taking money for one's vote in an election.
 1 2 3 4 5 6 7 8 9 : Newspapers treating crime news so as to make hoodlums and gangsters appear heroic.
 1 2 3 4 5 6 7 8 9 : A man having a vacant building he cannot rent sets it on fire to collect insurance.
 1 2 3 4 5 6 7 8 9 : Nations at war using poison gas on the homes and cities of its enemy behind the line.
 1 2 3 4 5 6 7 8 9 : Slipping out secretly and going among people when one's home is under quarantine for a contagious disease.
 1 2 3 4 5 6 7 8 9 : A man deserting a girl whom he has got into trouble without himself taking responsibility.
 1 2 3 4 5 6 7 8 9 : Disbelieving in God.
 1 2 3 4 5 6 7 8 9 : A man not marrying a girl he loves because she is markedly his inferior socially and in education.

APPENDIX J - concluded

Participants in other sections of this second session are involved in different tasks. Many of them are directly concerned with the values ranked earlier. Since you did not have an opportunity to see how all 304 participants ranked the values at the first session, we thought you might like to see them now.

The responses of all 304 students were averaged together and the list below shows the average order of importance.

- 15 A COMFORTABLE LIFE
- 12 AN EXCITING LIFE
- 9 A SENSE OF ACCOMPLISHMENT
- 8 A WORLD AT PEACE
- 13 A WORLD OF BEAUTY
- 10 EQUALITY
- 11 FAMILY SECURITY
- 2 FREEDOM
- 1 HAPPINESS
- 3 INNER HARMONY
- 4 MATURE LOVE
- 18 NATIONAL SECURITY
- 14 PLEASURE
- 17 SALVATION
- 16 SOCIAL RECOGNITION
- 7 SELF-RESPECT
- 5 TRUE FRIENDSHIP
- 6 WISDOM

To what extent do you feel your time is being well spent by participation in this study?

1	2	3	4	5	6	7	8	9
I am								It is very
wasting my time								worthwhile

Do you have any comments you wish to make about this study? Please comment on the reverse side. Remember, everything in this questionnaire is absolutely confidential, and to be used only for scientific purposes.

Thank you for your cooperation thus far. The final session will be held the week before finals week and we will contact you again about it. Also, we will sign experimental "credit cards" at the final session. Feedback on your responses thus far will also be provided at the last session.

APPENDIX K

Callback Letter for Posttest Session

MICHIGAN STATE UNIVERSITY

Department of Psychology

VALUES/BELIEF STUDY

Winter 1972

Dear Participant,

It's that time again! The third (and final!) session is coming up during the week of February 28-March 2. Your cooperation thus far has been most gratifying: of the more than 300 participants, over 98% were able to get to the second session. More importantly, your cooperation and thoughtful comments were invaluable.

This final session is going to be based on the suggestions that many of you made about the study and our procedures thus far. As I mentioned at the first session, one of our major interests was to have you tell us what might be right or wrong with our ideas. Having read and re-read all the comments, we feel that many of your suggestions and critical comments offer ideas for meaningfully improving our procedures. So, at this final session, we will ask you to help evaluate your own suggestions.

Additionally, we are preparing some materials which report your own individual responses, the responses of all those in the study, and those of Americans in our recent national survey. These materials will be yours to keep and hopefully you will find them interesting. You will be able to pick these up at this last session (God and the Computer willing).

We would ask that you come to the final session on:

TUESDAY - February 29
7:00 p.m.
111 Olds Hall

This is the same night of the week you came to the second session. Since identical sessions are being held each night of the week (Monday through Thursday) at the same time and place, you may reschedule yourself to any other night for any reason. However, if you change nights, PLEASE CALL 355-3441 (Dr. Rokeach's office) or 355-5338 (Dan McLellan) as soon as possible to tell us what night you wish to attend. Otherwise, we will not have your materials available for you on the new night.

With the miseries of winter and approaching final exams, this request for more of your time may seem excessive. However, your help thus far has provided a unique wealth of information for social science and this final session is essential to the complete success of the study. Also, let us not forget that we will sign your experimental "credit cards" at this time.

We again look forward to your return. And please remember to:

BRING YOUR EXPERIMENTAL "CREDIT CARD" TO THIS SESSION

Dan McLellan
Study Director

APPENDIX L

Value Importance Scale

VALUE SURVEY - PART 2

BE SURE YOU HAVE FINISHED RANKING ALL THE VALUE LABELS IN VALUE SURVEY BOOKLET BEFORE BEGINNING THIS PART

Among the most common comments made about sessions 1 & 2 were those expressing some dissatisfaction with the Value Survey. Many of you said that being forced to rank the values 1 thru 12 restricted your efforts to show how you really feel. For example, some people said that "just a few of the values are really important." Others said "most of the values are very important yet I'm forced to rank some very low." And others said, "some of the values are of the same importance but I'm forced to choose between them."

In an effort to give you the opportunity to better express yourself, we have developed a new ranking scale which reflects many of your comments. This new scale of value importance runs from 1 to 99 rather than from 1 to 12. With this longer scale, you can indicate the absolute importance of each value for yourself and also indicate what values tend to cluster together.

The procedure is very simple: you simply assign a new scale number to each of the values you ranked indicating where on the new scale the value falls for you. You are free to use as much or as little of the new scale as you need to show how you truly feel about the values.

Follow the directions on the next page and work quickly. Don't ponder too long on any value.

BEFORE YOU BEGIN, CAREFULLY REMOVE AND DISCARD THE WAXY BACKING SHEETS ON WHICH THE VALUE LABELS ORIGINALLY APPEARED. YOU WILL WRITE IN THE NEW SCALE NUMBERS NEXT TO EACH VALUE IN THE BOOKLET.

APPENDIX L - concluded

THE NEW "VALUE IMPORTANCE SCALE"

Follow these easy directions:

1. Do each page of values separately.
2. Look at the value you put in box #1 (most important). Decide where you would place that value on this new scale - then write the scale number next to the value in the booklet.
3. Next, look at the value you put in box #18 (least important). Decide where it should go on this new scale - then write the scale number next to the value in the booklet.

(NOTE: You may wish to mark on the new scale where these top and bottom values were rated.)

4. Then go on and rank the remaining values somewhere between the top and bottom values.

(NOTE: Values of equal importance may get the same number if they are of equal importance to you.)

* * * * *

The most important guiding principle in my life.

Everything I believe and

do is based on this value. (1)

1

10

20

30

40

50

60

70

80

90

99

Extremely Important. My whole life is organized around these principles.

Very Important. These principles are major guidelines in my life.

Moderately Important. These principles are important but not central principles for my life.

Slightly Important. These principles are of only limited and minor importance in my life.

Unimportant. These principles play very little or no importance in my life.

Not at all important to me.

Nothing I believe or do is

ever based on this value. (99)

APPENDIX M

Posttest Racial Attitude Inventory Instructions

OPINION INVENTORY

This booklet contains the same statements you responded to at the first session. The major criticism to this questionnaire was that we provided only two alternatives with which you could express your opinion: "Agree" and "Disagree". Many of you felt that this approach was too simplified.

To allow for a more sensitive expression of your own opinions, we have expanded the response categories from 2 to 8.

DIRECTIONS: Please read each statement carefully. Then fill in the number on the separate answer sheet which best represents your own opinion about each statement. Do not leave any blanks. Please answer every statement.

Be sure that the number of the statement agrees with the number on your answer sheet. Use pencil only on the answer sheet.

RESPONSE KEY:

- 1 = Agree Completely
- 2 = Agree Strongly
- 3 = Agree Somewhat
- 4 = Agree Slightly
- 5 = Disagree Slightly
- 6 = Disagree Somewhat
- 7 = Disagree Strongly
- 8 = Disagree Completely

NOTE: Do not use the "0" or "9" spaces on your answer sheet.

Now turn the page and go ahead. Work fast.

APPENDIX N

Posttest Feedback Sheet

VALUES-BELIEFS STUDY

Winter 1972

PURPOSES.

1. To continue investigations into the interrelationships of values, attitudes, and moral reasoning ability.
2. To assess your interpretation of and reaction to some theoretical concerns relating values and behavior.
3. To find ways of improving testing procedures from the participant's point of view.

What you were asked to do and why

Session 1. You completed (a) the Rokeach Value Survey, (b) an attitude questionnaire on race relations, and (c) the Kohlberg Moral Judgment Interview (stories about Heinz's wife dying of cancer, etc.).

The Value Survey consists of two lists of 18 value terms which you ranked in order of importance. One list is of desirable end-states of existence (e.g., A Comfortable Life) called Terminal Values and the other list is of desirable modes of behavior (e.g., Honest) called Instrumental Values. The computer prepared sheet on the front shows how you ranked these values at the first session. The next two pages show how everyone in this study ranked them and how a sample of the American people ranked them (both are also broken down by sex). The Value Survey was developed by Professor Milton Rokeach of MSU and has received wide usage both as a research tool and a teaching device.

The Moral Judgment Interview gave you an opportunity to express, in your own words, how you solve moral conflict situations. Professor Lawrence Kohlberg of Harvard has postulated an invariant sequence of stages in the development of moral reasoning and this interview is his method of determining how far you have developed along this sequence of stages.

Our major interest here is looking at the differences and similarities in values and attitudes for people at different stages of moral reasoning ability. Another concern is whether or not we can determine your stage of moral reasoning from the much simpler and quicker Value Survey as opposed to the longer, hand-written interview technique.

Session 2. Five different groups were established and each group was asked either to evaluate some of our ideas or to complete a questionnaire. In the four evaluation groups, we presented some information about the relationships between values, attitudes, and behavior.

The presentations to each evaluation group were similar in that we talked about the same theoretical relationships between certain attitudes, values, and behavior. The presentations differed by variously adding or subtracting the following elements from the presentation: (a) Presentation of actual data to support our theory (we want to know if the supporting data made our ideas any clearer); (b) Ranking your own values again (we want to know if being able to

APPENDIX N - concluded

- 2 -

"fit" yourself into the theory made it any clearer. Also, we wanted to know how stable your own value rankings were over the three week interval); (c) Presentation of our own interpretation of the supporting data (we want to know if those who wrote out their own interpretation came to the same conclusions we did).

The fifth group responded to a values questionnaire which has been given since the 1920's. We want to compare these responses with those of earlier generations of college students.

Session 3. From your reactions to the first two sessions, it was clear that many of you felt the Value Survey and the Attitude Questionnaire did not give you enough latitude in your responses to adequately tell how you really feel. Based on some of your suggestions, we modified both questionnaires in order to give you a better opportunity to truly express how you feel. In this way, we can compare the relative effectiveness and utility of the earlier versions of these tests with the new formats, while assessing the stability of your responses over an extended period of time.

A number of you have expressed an interest in finding out more about the issues and tests in this study. If you are interested, there are four articles in Psychology Today magazine which deal directly with the issues and tests used. Psychology Today is written for the layman and uses little statistics. The articles are short and easy to read if you have a few spare moments in the Library.

VALUES

1. Milton Rokeach, "Persuasion that persists." 1971.
(A report on a value-modification experiment done here at MSU in Madison and Briggs Colleges in 1968-69.)
2. Milton Rokeach, "Faith, hope, and bigotry." April, 1970.
(A report on values and religion in the American people.)

MORAL JUDGMENT

1. Lawrence Kohlberg. "The child as a moral philosopher." 1968
(This is the essence of his theory of moral development.)
2. C. Hampton-Turner & P. Whitten. "Morals left and right." April, 1971.
(Political beliefs and behavior in context of Kohlberg's stages.)

We want to thank you for your participation and cooperation during this study. Regardless of what you personally have felt about your tasks, you have made a substantial contribution to social science. Ideally, each of you would have had an invaluable experience by virtue of your participation. From your comments, we know that this, unfortunately, is not the case. The exigencies of the research process are the major cause of this. However, we want you to feel free to stop by our offices (204 C-D Olds Hall) if you have any questions, would like to review any of your responses, or are curious about any phase of the study. Since your own responses are confidential, please bring your I.D. if you wish to see them.

Again, thank you for your participation.

Dan McLellan

APPENDIX O

Supplementary Tables

TABLE 20. Pretest terminal value means for subjects at five stages of moral development.

	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6	F
	n = 41	117	63	22	11	
A comfortable life	10.80	12.18	12.14	13.00	15.27	2.46*
An exciting life	10.12	11.00	12.21	11.77	10.64	1.47
A sense of accompl.	8.07	9.13	9.13	8.36	9.64	< 1
A world at peace	7.85	7.03	8.60	5.68	5.27	2.42*
A world of beauty	10.41	10.85	12.06	11.09	11.09	1.24
Equality	9.02	8.60	9.41	7.18	6.55	1.65
Family security	10.10	9.46	8.71	9.77	10.36	< 1
Freedom	6.59	6.38	6.87	6.32	5.00	< 1
Happiness	5.56	5.57	5.56	6.55	5.82	< 1
Inner harmony	7.88	6.92	6.38	6.95	5.73	< 1
Mature love	6.59	7.56	6.63	6.82	5.91	1.01
National security	13.63	14.57	14.84	15.68	16.18	1.72
Pleasure	11.20	12.24	12.92	13.23	13.82	1.75
Salvation	13.88	12.66	9.43	12.77	13.18	3.79**
Self-respect	8.37	7.97	7.06	7.91	7.00	< 1
Social recognition	14.44	14.50	13.98	14.27	15.45	< 1
True friendship	8.10	6.77	7.59	7.05	7.00	1.17
Wisdom	8.39	7.61	7.46	6.59	7.09	< 1

* $p < .05$, ** $p < .01$.

APPENDIX O - continued

TABLE 21. Pretest instrumental value means for subjects at five stages of moral development.

	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6	F
n =	41	117	63	22	11	
Ambitious	8.61	9.36	9.48	8.86	11.09	< 1
Broadminded	6.27	6.37	7.46	6.32	4.18	1.51
Capable	9.49	10.16	10.11	10.36	10.09	< 1
Cheerful	8.85	8.97	7.95	9.86	8.73	< 1
Clean	12.17	13.54	13.87	14.23	16.36	2.55*
Courageous	9.61	9.99	11.05	9.23	8.18	1.50
Forgiving	8.41	6.44	6.29	8.23	5.18	3.05*
Helpful	9.63	8.27	8.05	7.59	6.55	1.64
Honest	6.39	4.21	4.08	5.45	4.36	3.17*
Imaginative	9.27	11.11	12.06	9.77	9.73	2.79*
Independent	7.54	9.53	10.10	7.82	7.55	2.46*
Intellectual	10.41	10.59	11.08	8.82	10.55	< 1
Logical	10.02	11.12	11.60	11.77	11.64	< 1
Loving	6.05	5.48	4.97	6.18	4.91	< 1
Obedient	16.51	15.32	13.81	15.68	17.09	5.13***
Polite	13.76	12.81	11.71	12.64	15.09	3.18*
Responsible	7.20	7.23	7.59	7.23	8.73	< 1
Self-controlled	10.80	10.50	9.75	10.95	11.00	< 1

* $p < .05$, *** $p < .001$.

APPENDIX O - continued

TABLE 22. Mean changes in equality ranking.

		Moral Level			Total
		I	II	III	
Control	(n)	(10)	(34)	(9)	(53)
	T ₂ -T ₃	.60	-.79	.11	-.38
	T ₁ -T ₃	1.90	-.50	-.67	-.08
SOF	(n)	(12)	(37)	(6)	(55)
	T ₂ -T ₃	1.42	1.49	1.17	1.44
	T ₁ -T ₃	1.67	.46	1.33	.82
OF	(n)	(5)	(41)	(8)	(54)
	T ₂ -T ₃	-	-	-	-
	T ₁ -T ₃	-2.80	.39	.88	.17
SF	(n)	(7)	(46)	(5)	(58)
	T ₂ -T ₃	.29	.13	.40	.17
	T ₁ -T ₃	-1.57	-.28	-1.00	-.50
SOF/N	(n)	(8)	(45)	(5)	(58)
	T ₂ -T ₃	.63	.11	-.60	.12
	T ₁ -T ₃	-.75	.38	-.20	.17
Total	(n) T ₂ -T ₃	(37) .81	(162) .24	(25) .28	
	(n) T ₁ -T ₃	(42) .19	(203) .10	(33) .09	

ANALYSES OF VARIANCE:

		SOURCE	df	MS	F	p
T ₂ -T ₃		Treatment (A)	3	12.10	1.24	ns
		Moral Level (B)	2	3.02	.31	ns
		A x B Interaction	6	2.01	.21	ns
		Error	212	9.80		
T ₁ -T ₃		Treatment (A)	4	18.38	1.18	ns
		Moral Level (B)	2	2.41	.15	ns
		A x B Interaction	8	16.44	1.05	ns
		Error	263	15.63		

Note.-- T₂-T₃ = 4 week treatment-to-posttest period,
T₁-T₃ = 7 week pretest-to-posttest period.

APPENDIX O - concluded

TABLE 23. Mean changes in freedom rankings.

		Moral Level			Total
		I	II	III	
Control	(n)	(10)	(34)	(9)	(53)
	T ₂ -T ₃	.70	.65	-.56	.45
	T ₁ -T ₃	.70	.35	-.78	.23
SOF	(n)	(12)	(37)	(6)	(55)
	T ₂ -T ₃	1.00	.84	.50	.84
	T ₁ -T ₃	3.25	.86	.83	1.38
OF	(n)	(5)	(41)	(8)	(54)
	T ₂ -T ₃	-	-	-	-
	T ₁ -T ₃	6.60	1.80	1.25	2.17
SF	(n)	(7)	(46)	(5)	(58)
	T ₂ -T ₃	-1.00	.57	-.60	.28
	T ₁ -T ₃	-.29	.87	-.40	.62
SOF/N	(n)	(8)	(45)	(5)	(58)
	T ₂ -T ₃	-1.38	.73	1.00	.47
	T ₁ -T ₃	.75	1.31	1.60	1.26
Total	(n) T ₂ -T ₃	(37) .03	(162) .69	(25) .00	
	(n) T ₁ -T ₃	(42) 1.98	(203) 1.07	(33) .42	

ANALYSES OF VARIANCE:

		SOURCE	df	MS	F	p
T ₂ -T ₃		Treatment (A)	3	6.28	.57	ns
		Moral Level (B)	2	7.71	.70	ns
		A x B Interaction	6	6.94	.63	ns
		Error	212	11.00		
T ₁ -T ₃		Treatment (A)	4	48.38	4.01	<.01
		Moral Level (B)	2	35.93	2.97	<.10
		A x B Interaction	8	19.17	1.59	ns
		Error	263	12.08		

Note.-- T₂-T₃ = 4 week treatment-to-posttest period,
T₁-T₃ = 7 week pretest-to-posttest period.

LIST OF REFERENCES

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