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THE EFFECTIVENESS OF VALUE EDUCATION IN CHANGING VALUES AND SELF-REGARD IN ADULT PSYCHIATRIC INPATIENTS

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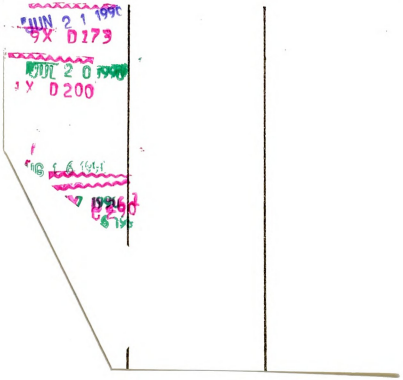

THE EFFECTIVENESS OF VALUE EDUCATION IN CHANGING VALUES AND SELF-REGARD IN ADULT PSYCHIATRIC INPATIENTS

By

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ABSTRACT

THE EFFECTIVENESS OF VALUE EDUCATION
IN CHANGING VALUES AND SELF-REGARD
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The present study was designed to assess the effectiveness of value education in modifying the importance of selected values and increasing self-regard with adult psychiatric inpatients. Four values, freedom, self-respect, responsible, and self-controlled, were found to exhibit significant increases in ranked importance on Rokeach's Value Survey from the time of admission to discharge for a sample of 58 patients in a pilot study.

A second phase of this study consisted of experimental efforts to modify the importance of the four values using another sample of 120 incoming patients representing balanced numbers of males and females and psychotic and nonpsychotic admitting diagnoses. Four experimental value education exercises (treatments) were designed, each aimed at one of the four "target" values, i.e., targets for change. Each treatment provided the subject with three types of information: (1) a table showing high, average, and low "scores" for a target value obtained by former patients, (2) descriptive characteristics of patients who place high importance on the value and patients who place low importance on it, and (3) the experimenter's conclusions about the significance of the value when it is ranked high or low. A fifth, control treatment,

was designed which simply presented a series of statements suggesting that values, generally, were important to examine.

Each subject first rank-ordered his values on the Value Survey and was then administered his randomly assigned treatment. The Value Survey was administered immediately following treatment and two weeks later. At two weeks, scales purporting to measure similar constructs as the target values (indirect measures) were also administered. At three weeks, four measures of self-regard were administered. It was predicted that after intervention each experimental group would (1) place greater importance on its respective target value, (2) show less variance in the ranked importance of its target value, (3) place more importance on indirect measures of its target value, and (4) exhibit higher self-regard than control subjects.

Omnibus F tests were first used to identify treatment effects and interactions of treatment with sex and diagnosis. Repeated measures ANOVAs were used to assess effects on each target value's ranking and each target value's variance (Levene's test). MANOVAs were used to assess effects on each set of indirect measures of target values and the set of self-regard measures. All significant treatment effects and simple main effects for sex and diagnostic groups were followed by post hoc tests of the directional effects predicted.

Analysis of treatment effects on target value rankings indicated that patients receiving value education aimed at responsible obtained a significantly higher mean rank on responsible over time than patients in two contrast groups. Psychotic patients receiving the responsible exercise obtained a significantly higher mean rank on responsible two

to three weeks after treatment than psychotic patients receiving the four comparison exercises. None of the remaining treatments showed significant effects on their respective target values.

Analysis of treatment effects on target value variances revealed significantly less spread of self-respect ranks immediately after treatment for females receiving the self-respect exercises than females receiving the responsible exercise. Males receiving the responsible exercise revealed a significant decrease across time in the spread of responsible ranks when compared to males receiving the freedom exercise. Contrary to prediction, experimental interventions generally increased the spread to target value rankings, while the control group consistently revealed the least spread in each target value's rankings.

Only one of nine indirect measures of target value importance was effected by value education. Females receiving the freedom exercise placed significantly less importance on acceptance of authority than females receiving all other treatments when observed two weeks after intervention. No association between any value education exercise and increased self-regard was found.

DEDICATION

To Bev, my wife, and my sons, Tom and Dave, who have cheerfully accepted the extra burdens placed on them and supported me with love and unending patience.

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CHAPTER I

INTRODUCTION

A heightened interest in values is being prompted by the special needs of society developing in recent decades. More than ever, contemporary society manifests accelerating technological growth, diverse educational and occupational opportunities, an enormous array of products and services, concerns about environment, resources and population, changing family structures and life styles. These are some of the many factors involved in a movement from absolutism to relativism in culture (Smith, 1963) that arouse value conflicts within traditional, relatively stable value systems serving individuals, groups, and society.

While each generation has always challenged and modified the value systems of its predecessors, the process has been sufficiently gradual and limited in scope to provide continuity across generations. It is not change per se that has led to value crises in contemporary society. It is the rapid rate of change that is implicated. Accelerating change contributes to a geometric expansion in the range of choices and can render any given value system obsolete before it acquires an enduring stability (Buhler, 1962). Frequent and repeated disillusionment with the guiding principles in individuals' lives will likely have far-reaching effects on their social and

emotional development and functioning. Some degree of change in an individual's value system likely reflects growth and increasing maturity. Other changes may reflect a desperate search for a stable identity and meaning in a world where diversity in choices generates anxiety and rapidly fluctuating values alienate individuals from themselves and others. The institutions of society and the behavioral sciences, in particular, are now confronted with a myriad of questions concerning the nature of values and their relevance in addressing the practical problems of society and human lives.

Values and the Social Sciences

The concept of human values has not yet found its established place among the important constructs within the social-behavioral sciences. Although values provide a favorite topic of discussion in many disciplines, systematic inquiry into the nature of values utilizing empirical methods has been scant. No unifying or dominant "value theory" exists for social-behavioral scientists (Smith, 1963), nor has any major theory of personality accorded values an integral role in human development and behavior. Among social scientists exploring group phenomena, some traditional interest has existed in understanding values as characteristics of cultural groups or political and ideological systems. Behavioral scientists with interests directed at the psychology of the individual and intrapsychic processes have almost entirely avoided the topic of values held by individuals. The role or significance of values in cognition, and personality generally, is a direction in which inquiry has only begun.

Relatively recent developments, however, suggest that the issue of values is growing in importance in some areas of applied psychology. Educators recognize a broadening conception of educational needs. The concept of "affective education" includes such specialized educational objectives as "value clarification" (Raths, Harmin, & Simon, 1966). The work of Kohlberg (1964) in the Piagetian tradition has revitalized interest in moral development lying dormant since the early studies of Hartshorne and May (1928). Rokeach (1973) has steadfastly worked over several decades to formulate and provide empirical validation of one of the most comprehensive "value theories" to date. Others have addressed questions about the significance of values in mental health and psychotherapy (Buhler, 1962; Lowe, 1969). Smith (1961) suggests the concept of "mental health" conceals a pure value problem. From various areas, questions about values have been slowly coming into focus. The recent trend toward cognitive perspectives throughout psychology (Mahoney, 1977) promises to provide even greater impetus to the study of values.

Early Deterrents to the Study of Values

Rapid social change has inevitably generated new needs and worked to challenge and dissolve value systems of the past giving rise to the contemporary concern over values in society and social science. In contrast to these contemporary forces, there are numerous factors which, until 30 years ago, deterred behavioral scientists from inquiry into values and still act as deterrents today (Smith, 1963).

Science in its "pure" sense has traditionally concerned itself with facts and methods in which values have no place. Value concerns have been assigned to the domains of philosophy, ethics, and religion. Efforts to have a value-free scientific method have created an indifference and a tendency to dismiss values as potential scientific subject matter (Dukes, 1955).

The notion of values as a relevant construct in psychology presents difficult conceptual and definitional problems that have also worked against its inclusion in theory and research. Values transcend specific situations and are expressed in highly abstract terms. Constructs such as needs, attitudes, or traits reflect lower-order abstractions more readily defined, measured, and linked to motives and observable behavioral events. As theory building proceeds out of empirical research those explanatory constructs most proximal or easily related to observable events are likely to receive proportionately greater attention in research. The broadly inclusive and abstract character of values as a construct may have discouraged research efforts while awaiting further theoretical development of other lower-order constructs.

Not all theorists have accorded values a status conceptually distinct from other constructs, but prefer to equate values with such constructs as needs, social norms, interests, attitudes, and traits. The ease by which values can be reduced or equated with existing constructs may be a function of their abstract character as well as the common motivational bases shared by these various constructs.

When values have been given a distinct place among constructs, they have generally been viewed as highly stable or fixed as in the tradition of trait psychology. Such variables typically are regarded as extraneous or "nuisance" variables with less appeal as variables of interest in dynamic formulations of personality or experimental approaches concerned with manipulation of independent variables and change in dependent variables.

In addition to the conceptual barriers to research, values do not readily lend themselves to measurement. Their broad characteristics and the difficulty linking them to specific events demonstrating their relevance and strength may again be one factor. It has been observed that attitude studies outnumber value studies about six to one (Rokeach, 1973). Attitudes are conceptualized and measured as lying along a continuum with negative and positive poles. Values do not lend themselves to measurement following such a model, since a given value is typically conceived of only lying in a positive direction and having relevance primarily in a hierarchical relationship to other values and less on some singular measure of the strength of a particular value. Scaling techniques developed by Guttman and Likert have been credited with promoting attitude research. Comparable techniques for value measurement have not been readily available until Thurstone's (1954) approach to the subjective metric and value measurement. While the absence of adequate research tools has certainly discouraged value research, their development has in turn been hampered by the theoretical and conceptual difficulties associated with values.

In summary, deterrents to value inquiry first of all stem from a philosophy of science which traditionally has denied any role of values in determining its own methods and objectives coupled with a phobic avoidance of values as scientific subject matter. Secondly, conceptual, theoretical, and methodological concerns have presented an interrelated set of obstacles impeding efforts to systematically explore values.

Scope of Value Inquiry

Since questions about values may arise wherever human concerns exist, the scope of value inquiry is exceedingly broad, involving almost any context or discipline. The level of questions may range from values held by individuals to the values of institutions, ideological systems, cultural groups or nations. Empirical inquiry may proceed along a multitude of lines in building value theory and integrating it with the constructs in current social and psychological theories. Within psychological theory alone, the acquisition, organization, and function of values and value systems within the individual's cognitive system raise a host of questions. The relationship of values to affective and behavioral components of human functioning and the conditions and consequences of value change provide numerous avenues of study. Anthropology, sociology, political science, and other disciplines each provide domains of special concern.

Applied Psychology

The functions of values as both products and processes in cognition and their special significance in relationship to self-conceptions represent major areas in psychology where existing theories need to be expanded and integrated with value theory. Since values are closely linked with cognitions involving the appraisal of self, others, or objects and events relevant to the self, it is likely that the dynamic motivational features of values will take on greater importance in conceptions of personality, emotional, and social development and functioning as research progresses (Smith, 1963).

As the significance of values, the processes by which they are learned, and their functions become clearer, value theory will have practical implications for parents, educators, counselors, and others interested in behavioral guidance and change. Parents have traditionally assumed the responsibility of directly transmitting their values to their children and allowed only those social institutions sharing similar values to assist in the process. Generally, individuals or institutions less directly identified with parental authority are reluctant to say they are teaching or differentially promoting selected values. The term "value clarification" and its methods suggest a neutral position on the part of the educator in which no preference is offered for one value over another.

A similar posture has been taken by many counselors and psychotherapists whether assisting an individual in making specific life decisions or in treating him for any of the array of

psychopathological disorders or personal adjustment problems. Psychotherapists in their professional role usually come from the mental health tradition with the corresponding disease model most apparent in psychoanalysis. Again, the scientific tradition deterred medical practice as well as research from any direct concern with values. Psychotherapists oriented to the learning tradition, and equally respectful toward "pure" science, have also functioned as if value considerations are not relevant in their applied work.

Values Within the Psychotherapeutic Setting

While the scientific tradition has deterred practitioners from facing the problem of values in their work, counselors and therapists are increasingly acknowledging values as an important variable in therapy. However, those therapists willing to face the problem of values remain in a dilemma. Existing value theory is skeletal, with a limited data base, and rather isolated from prevailing theories of personality, psychopathology, and psychotherapy. Almost all studies of values and therapy have been of a descriptive or correlational nature (see reviews by Ehrlich & Wiener, 1961; and Kessel & McBrearty, 1967). In the psychotherapeutic setting, value concerns and issues may be directed at any of three major areas where values can be found. These areas include (1) value orientations associated with various theoretical systems, (2) therapists' values, and (3) patients' values.

In psychotherapy, the broadest concerns with values may involve questions about the value orientations implicit in competing theories of personality and psychotherapy. What differences and similarities

exist in terms of values regarded as relevant and important for healthy functioning (Smith, 1969)? What are the implications of different value orientations for the objectives and methods of psychotherapy? How are varying, perhaps incompatible, value systems integrated in an "eclectic" approach to psychotherapy?

At the level of individual psychotherapists, questions arise concerning the interrelationship of the therapists' personal value systems and the system they subscribe to in their professional and theoretical orientation. To what extent are selected values communicated or promoted and by what direct or indirect means? To what extent does a therapist practice and recognize various levels of neutrality or nonneutrality? Are particular values implicated more readily than others in the issue of neutrality? Is value change regarded as an objective or by-product of therapy when it occurs? Is the responsibility for such change seen as lying with the therapist or patient? These are some of the many issues likely confronting therapists who seek to understand the relationship of their own values and behavior both as individuals and practitioners.

Questions directed at patients' values are likely to reflect theoretical concerns about the nature of values and psychopathology and applied concerns about the significance of particular values in the treatment of individuals within the patient population. Questions may be directed at differences between the value systems of patients in comparison to normal individuals. Do differences in the value systems of these groups reflect important values associated with effective social and psychological functioning? As entering

characteristics, do the values systems of individual patients have diagnostic significance in assessing the patients? Do they provide prognostic information and implications for planning the design and methods of treatment? To what extent do changes in values occur as a function of treatment? What are the interaction characteristics of patient and therapist values within the therapeutic process? Are some value changes prerequisite for improvement in other criterion areas of functioning? Should direct efforts be taken as part of therapy to bring about changes in such values? What methods are effective in inducing value changes? What psychological mechanisms are involved in value change and related changes within the personality system?

The Need for This Study

It is at the level of patient's values that this study is selectively directed. The many questions raised above continue to await answers based on empirical study. The present study is offered as an empirical approach directed at a few key questions. Can "psychologically important" values be identified? Assuming that some values, more than others, may have significant intrapsychic implications, it may be within the psychiatric population that dysfunctional value systems can be identified and associated with dysfunction in personality and behavior. Can such identified values be directly modified by educational interventions? Will indirect changes be observed in lower-order and higher-order cognitions as predicted by value theory? Value theory at present generally

suggests that other values and attitudes related to a particular value undergo change as a function of the more central value change (Rokeach, 1973). In addition, value theory postulates the primary function of values to be the maintenance and enhancement of self-regard. On that basis, modification of psychologically important values should ultimately change self-regard. Presumably, changes in psychologically important values and enhancement of self-conception and self-esteem early in the course of contemporary psychiatric treatment will facilitate such treatment, which is often aimed at enhancing self-conception. By directly centering on those cognitions or beliefs crucial to effective psychological functioining, both the speed and potency of psychotherapy may increase.

Research in the psychotherapeutic setting will have implications for understanding the role of values in all individuals to the extent that the same processes and their psychological significance hold true for all populations of individuals. The benefits of research on patients' values will have immediate benefits in generating new insight and modifications in existing methods of therapy and counseling as well as promising new methods uniquely focused on value change. In addition, the psychological significance and substantive relevance of particular values for effective human behavior is likely to become clearer and serve as a basis for evaluating the value systems implicit in various theoretical orientations and therapeutic strategies. Therapists too may profit from having a clear point of reference to evaluate those values guiding their lives and professional practices.

Purpose

The primary purpose of this study was to assess the effectiveness of value education directed at four empirically selected target values, freedom, self-respect, responsible, and self-controlled. Four value education exercises which differ in terms of the target value examined and a non-targeted (control) exercise were used. The targeted value education exercises were evaluated in terms of their effectiveness in (1) increasing the ranked importance of the target value relative to other values within the individual's value system, (2) establishing a consistent level at which the target value was ranked across the group of individuals receiving the same exercise, (3) increasing the importance of value constructs presumed to be closely related or synonymous with the ranked target value, and (4) enhancing selected dimensions of self-regard.

The identification of the four target values was a prerequisite for this study. That objective was accomplished in a pilot study which is presented in detail in Chapter III.

Research Hypotheses

There were four major hypotheses under investigation in this study which are stated as follows:

Hypothesis 1:

> Patients who receive value education aimed at examining the importance of a particular target value will rank that value higher within their value systems than patients receiving other value education exercises.

Hypothesis 2:

> Patients who receive value education aimed at a particular target value will, as a group, exhibit less variability in the level of ranking that value than patients receiving other exercises.

Hypothesis 3:

> Patients receiving value education aimed at a particular target value place more importance on value constructs closely related to the target value than patients receiving other exercises.

Hypothesis 4:

> Patients receiving value education aimed at a psychologically significant target value will exhibit higher self-regard than patients receiving a non-targeted control exercise.

Theory and Methodology

The work of Milton Rokeach over the past several decades has yielded a fairly comprehensive value theory which is integrated with both a theory of cognitive change and a humanistic perspective of personality development (Rokeach, 1973). Based on these formulations, Rokeach's methodological contributions include an instrument for measuring values, the Value Survey (1967), and a model for value education. Rokeach and others have contributed to a growing body of empirical studies for over a decade using his theory and methods.

The present study was based on Rokeach's theoretical framework and used both his instrument and an adaptation of his value education model. The present study is different from much of the earlier work in the Rokeach tradition in several respects. First, it was directed at a psychiatric population. Second, it used additional methods of

measuring the changes in target values. Third, it directly considered the effects of value change on self-regard.

Overview

In the present chapter, a sketch of the contemporary position and importance of value theory within social science has been presented. In Chapter II, a more detailed presentation of Rokeach's formulations is undertaken within a broader theoretical discussion of major constructs and issues related to values, value systems, self-conception and cognitive change. Chapter III is a detailed description of the pilot study which provided the empirical background for the experimental value education exercises under investigation in this study. The pilot study primarily served to identify psychologically important target values for the patient population and map the relationship of the target values to other patient characteristics. In Chapter IV, the design and methodology of the experimental value education phase of this study is presented. The specific dependent variables are identified and the instruments used as outcome measures are described. The basic value education procedure and methods of data collection and analysis are described. The analysis of results is presented in Chapter V by examining, in turn, the effects of value education on (1) target value rankings, (2) variance in target value rankings, (3) indirect measures of target values, and (4) measures of self-regard. In Chapter VI, a summary of this study is presented with conclusions about the effectiveness of value education and directions for further research.

The unsatisfactory state of value theory and many directions for research that may ultimately lead to further integration of value theory and self-concept theory will begin to be apparent in the theoretical discussion to follow.

CHAPTER II

THEORETICAL BACKGROUND

Within this chapter, the major formulations of Rokeach are presented and discussed in a broader theoretical context to examine issues and constructs closely related to his theory though, at times, not fully articulated within it. The discussions in this chapter fall into three major areas: values, self-conception, and cognitive change.

The Concept of a Value

The definition of a value formulated by Rokeach (1973) provides the foundation of the present study. Before examining his definition, some of the major issues of diversity related to the concept of value will be discussed in order to set some philosophical boundaries around the concept of value and clarify some basic value terms. First, approaches to classifying values will be identified. Second, the issue of whether values are subjective or objective will be examined as the central one underlying most diversity surrounding the concept. Finally, Rokeach's definition of a value will be discussed.

Classifying Values

Rescher (1969) has outlined six major dimensions on which values can be classified. These dimensions provide a starting point with some heuristic convenience for identifying some of the conceptual issues underlying any definition of the construct value.

1. Values may be classified by their subscribership, i.e., who holds the value. A particular value may be held by an individual or by some specified group of individuals. However, when considering a value held by some group it is implied that a substantial number of individuals within the group subscribe to the value.

2. Values may be classified by the objects at issue. The objects may be things, individuals, groups, or societies, which specify the domain where the value, conception of some desirable characteristic, is applicable.

3. Values may be classified by the benefits realized by the value. The needs, wants, desires, interests, or other motivational forces provide categories of benefits that may be realized by certain values. For example, a social benefit may be realized by a value such as courtesy.

4. Values may be classified in terms of the purposes at issue. Classification involves describing the mechanism by which the benefit underlying the value is realized. An object, activity, or event may be regarded as having "X value" or "value for X purposes" where X denotes some functional characteristic that ultimately leads to the realization of some benefit. This line of classification may be

viewed as evaluation of specific objects and events or assignment of "value" to specific things. Much confusion arises out of the two usages of "value", i.e., an object having value and a person having a value.

5. Values may be classified in terms of the relationship between the subscriber and the beneficiary. This essentially leads to two broad classes of values, self-oriented and other-oriented values. Other-oriented values may range in applicability from very select groups to mankind generally.

6. Values may be classified in terms of the relationship of a value to other values. Some values may reflect ends in themselves, i.e., realization of the value has intrinsic merit, reflects a goal, or terminal state of affairs. Other values may be viewed as subordinate in the sense of mainly facilitating the realization of the end or terminal values. These values are the means values or instrumental values which have more immediate relevance in guiding activities on a daily basis.

These dimensions may be considered in terms of their parallel features and the sorts of complex classification systems that may be developed by crossing various dimensions with one another. It should be noted that the conceptual dimensions above yield largely categorical classifications. Rescher (1969) notes that quantitative dimensions can be introduced which consider such things as the hierarchy of importance of values within categories of classification. Temporal expectations related to the immediacy of receiving benefits

related to certain values may be quantifiable. In addition, a special and highly narrow type of quantitative classification system is apparent when objects or activities are scaled in terms of exchange value via monetary units. Many of the concepts of value and value theory stemming from the field of economics are applicable in the social sciences' struggle with the concept of value. Concepts such as supply and demand, cost-benefit analysis, exchange value, indifference curve analysis, and preference ordering of goods may be suggested by the discussions throughout this chapter.

Values as Subjective or Objective Phenomena

Perhaps the most central issue, historically, related to defining the construct value has been a question of whether values are subjective or objective. This problem has been discussed in detail by Frondizi (1971) who phrases the question as follows: "Are things valuable because we desire them (subjective), or do we desire them because they are valuable (objective)?" The extreme subjectivist position has been expressed by Dodd (1951), "Let a value be defined as a desideratum, i.e., anything desired or chosen by someone sometime." The extreme objectivist views a value as existing independently of any subject and as a type of object in itself. "Values are absolutes, existing in the mind of God as eternal ideas, as independent validities . . ." (Adler, 1956). At both extremes, the value is located outside of the individual whose behavior may be under study (Barton, 1962). In one case, an object is a value in itself if it elicits interest from the subject. In the other case,

a value itself is a type of object, with intrinsic merit, in the form of an idea to be discovered and subscribed to by the subject.

Frondizi (1971) attempts to solve the subjective-objective problem by positing a tension between subject and object that varies in predominance along a hierarchical continuum of values. At the lowest levels, where objects are the sources of immediate pleasurable or unpleasant experiences, the subjective predominates with each individual crediting some value to the object as a function of his experience. At the highest point, involving ethical values, the objective predominates. A value such as justice has a kind of objectivity that is compelling apart from the subject's experience or desires.

Baier (1973) has attempted to resolve the problem in a somewhat different manner by distinguishing between two kinds of value assertions. He defines value imputations as assertions that someone holds or subscribes to some particular value. An imputed value is viewed as a fact demonstrated by some measure of the individual's behavior to promote certain ends. Baier defines value assessments as assertions that some object or event has some capacity to favorably affect someone's life. An assessed value is the measure of the capacity of something to confer a benefit. Here, we see most clearly the distinction between (1) value as a qualitative belief that is subscribed to by a person or imputed to a person by an outside observer and (2) value as a quantity (of varying specificity and reliability) assigned to some object.

An assessed value is a product, judgement, or outcome of the process or activity of evaluating. While closely related, the process of valuing is not synonymous with evaluating. Valuing is generally used to denote the activities of selection and subscribing to imputed values as well as assigning some degree of hierarchical organization and commitment to them. Evaluation uses and applies imputed values as tools (criteria) to produce (measure) assessed values for various entities. The terms, value judgement or value conclusion, are synonymous with assessed value in terms of being the same type of cognitive product. Value judgement and value conclusion are merely broader terms that come into use when the evaluation process becomes more complex. Consider the cognitive processes involved in arriving at a single assessed value (e.g., good or bad, right or wrong, has value or has no value) for a highly complex issue (Coombs, 1971). A complex issue would involve multiple facts about multifaceted objects and events to be assessed in terms of multiple criteria (imputed values) of varying strength relative to one another. In contrast, determining the assessed value for a single feature of an object using a highly reliable standard is a simple matter. In fact, this simple case is only an act of measurement and becomes a case of evaluation or value judgement only if the standard's scaling is also correlated with a dimension of desirability or preferability. This additional dimension is based on some imputed value, i.e., a variable criterion or conception from one individual to the next.

The distinction between "desire" and a "conception of the desirability" parallels the subjective-objective issue. Most social scientists hold to the "conception of desirability" as a key part of defining imputed values. This is a more or less objective stance in which a value is a concept or abstraction, and, therefore, is objective in the sense that it may or may not be recognized or selected and subscribed to. Social scientists vary more in terms of what is meant by "desirability" in arriving at definitions of value. In most cases, desirability is considered in a social context, wherein the benefits involved consider jointly the good of the individual and others. Desire may be in conflict with what is desirable for either an individual's or other's welfare. Conceptions of what is personally desirable may include satisfaction of individual desires and goals when they ultimately benefit a person and do not interfere with legitimate demands from others. The legitimate demands people place on one another give rise to social values and define the moral parameters of value (Baier, 1973).

Definition of a Value

Most attempts to define a value among social scientists fall between the extremes of subjectivism and objectivism with a predominant emphasis on objective formulations. Some representative definitions which have clearly influenced the most recent definition offered by Rokeach should be noted. Morris (1956) identified three kinds of values: (1) "Operative" values reflecting what people actually choose, (2) "Conceived" values reflecting what individuals

conceive as desirable or preferable, and (3) "Object" values reflecting what is preferable whether or not it is preferred or conceived as preferable. Morris' "conceived value" is similar to Kluckhohn's (1952) definition of a value as "a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means and ends of action." Williams (1968) has defined values as criteria or standards used in making evaluations or judgements.

Rokeach provides the following definition of a value. "A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode . . ." (Rokeach, 1973, p. 5).

In defining a value as "enduring" Rokeach emphasizes the relative stability of values. He points out that values are acquired in an absolute manner, i.e., an end-state or mode of conduct is either preferable or it is not. Any instability or possibility for a change lies in the integration and various hierarchical structures of values that are possible in the value system as a whole. The absoluteness of the belief is further implied in Rokeach's use of the phrase "preferable to an opposite or converse mode . . ." which considers each value label in contrast to its antonym or negation of the belief. To this extent, Rokeach assumes that all men possess the same values (to different degrees) and, furthermore, implies that values cannot be abandoned once subscribed to. In an earlier definition, Rokeach (1968) used the phrase "preferable to alternative

modes . . . or end-states . . ." which was less specific and defined a value in relationship to other values rather than as a single entity.

The term "belief" clearly denotes a cognition. Rokeach specifies a value as further belonging to the class of beliefs labeled prescriptive or proscriptive. These beliefs are differentiated from (1) descriptive or existential beliefs (factual, true or false) and (2) evaluative beliefs wherein some object is judged good or bad. Evaluative beliefs are assessed values (or value judgements) as defined by Baier (1973).

Rokeach uses the term "preferable" in contrast to "desirable" which is frequently favored by others. His rationale is that the term "desirable" is difficult to define and confused with desire, when upon analysis a value is really a preference for some mode or end-state over its opposite. However, not all preferences are values. Only those preferences exhibited when modes of conduct or end-states are paired with their opposites are values. In distinguishing between "specific modes of conduct and end-states of existence," Rokeach maintains the dual classification of values as primarily either <u>instrumental</u> or <u>terminal</u>. As a secondary classification, Rokeach uses the phrase "personally or socially preferable." It is not immediately clear from this definition whether the personal-social distinction refers to the domain of applicability (object) of the value or the beneficiary of the value. Rokeach's discussion of the issue (1973, pp. 7-11) suggests that the beneficiary of the value may be implied in the distinction. In fact, the value

systems an individual would impose on himself (one domain) and on others (other domains) might be substantially different, particularly when values with a personal focus are involved, i.e., those less implicated in social organization and morality.

The Concept of Value Systems

Rokeach's conception of a value as a singular entity is one in which values are absolute and objective. They are relatively limited in number and possessed by all individuals. There can be no consideration of individual differences in terms of saying that one individual has a particular value while another does not.

It is possible to conceptualize individual differences in the degree of differentiation and salience of a single value and to attempt to measure such differences. It is also possible to consider individual differences in the hierarchical organization of values in relationship to other values within the individual's system of values. Here, measurement of individual differences associated with a single value yield a measure of relative importance always obtained in the context of an individual's other values.

Rokeach defines a value system as "an enduring organization of beliefs concerning preferable modes of conduct or end-states of existence along a continuum of relative importance" (1973, p. 5). In his definition of a value, the term "enduring" may have been unnecessary since the definition and underlying assumptions specify that a value is a fixed belief. In the definition of value system, the term "enduring" is more clearly a relative one, indicating a

degree of stability in the organization of a system of fixed beliefs yet allowing for change in that organization.

This definition of value system further specifies two primary types of values, instrumental and terminal. The definition implies separate systems or continua corresponding to the two sets of values. Although separate, the two systems are functionally related with instrumental values theoretically playing a subordinate role to terminal values.

Terminal Value System

Rokeach estimates the number of personally or socially preferable end-states to be about a dozen and a half. Since his Value Survey involves the rank ordering of 18 terminal values on one continuum and 18 instrumental values on a second continuum, he implies that this set of identified terminal values nearly exhausts the population of terminal values. The organization of an individual's terminal value system is viewed as more stable than the instrumental value system. Terminal values are more fundamental, as well as abstract, in the sense of being limited to the most basic intrapersonal and interpersonal needs of individuals. The factors affecting the organization of terminal values may also be limited. There may be a limited number of fundamental value orientations (Kluckhohn & Strodtbeck, 1961) or core beliefs of an existential or philosophical nature about man's relationship to himself, nature, or society that influence the organization of terminal values. In addition, varying levels of cognitive development, maturity, personal

integration, and other similar factors may limit the number of organizational patterns likely to be found.

Instrumental Value System

Rokeach estimates the number of instrumental values to be as high as five to six dozen. Since the second part of his Value Survey involves the rank ordering of 18 instrumental values, only a sample (about 20 to 35 percent) of the population of instrumental values is represented in his instrument. Instrumental values are less stable in organization than terminal values. The range of preferable modes of conduct is wider than the range of end-states and allows for greater variability in the paths and priorities used to achieve those ends. The factors facilitating and inhibiting modes of conduct are likely to be of greater number and involve the availability of specific cultural and personal resources in realizing instrumental values.

Rokeach distinguishes between two primary types of instrumental values, competence values and moral values. Competence values are more personal in focus and reflect an individual's standards of adequacy and self-actualization. When important competence values are violated or unrealized, feelings of shame over inadequacy may be aroused. Moral values are interpersonal in focus and reflect modes of conduct directly affecting others. Moral values, when violated, arouse feelings of guilt over doing wrong. Moral values are associated with the most intense experience of "oughtness." This experience is seen as originating within widely shared social demands that

people place on one another and themselves in order to ensure survival and other benefits within a social environment. A social norm is easily confused with a moral value because both refer to prescriptive or proscriptive beliefs about required modes of behavior. However, social norms refer to specific rules of behavior governing specific situations. Norms may or may not facilitate the realization of transcending moral values.

Problems Related to the Terminal-Instrumental Distinction

The distinction between terminal and instrumental values is fairly clear in differentiating between two separate systems that are functionally related. However, the distinction can also be applied within the systems themselves. As such, the organization of the terminal value system may have a terminal value functioning as an instrumental value to another terminal value. Conversely, one instrumental value may be instrumental in the attainment of another.

Generally, the continuum of instrumental values is considered to be of lower ultimate importance than the continuum of terminal values. However, when the conception of instrumentality enters in the organization of values on the same continuum, it is not clear how this functional relationship may effect the relative importance an individual places on the values. This problem raises questions about "response set" in ranking values. That is, one individual may interpret importance in terms of the ultimate value where another may view importance in terms of temporally more urgent or prerequisite value. The idea of urgency is similar to notions of value

arising out of deficiency or demand with limited supply. Expectations of attainability of the more ultimate values may enter into one's interpretation of importance. A strong social or moral orientation may weight related values more heavily on a scale of importance. Indeed, "response set" and "functional interrelationships" in value system organization may be nearly equivalent processes.

Value Systems as Two Subsystems Within the Organization of the Cognitive System

Considering the structural aspects of the total belief system, Rokeach (1973) proposed an organized system composed of 10 interconnected subsystems. These subparts differ in the type of cognition included and in the relative centrality of the cognitions in both the cognitive and personality systems. The most central or core subsystem is comprised of cognitions about the self and represents the most stable and dynamically important beliefs in cognition and personality organization. Decreasing on the centrality dimension, self-conceptions are followed by the terminal and instrumental value systems.

A fourth type of cognitive subsystem is an attitudinal system or the organization of two or more attitudes into an ideological system. A single attitude is another type of subsystem as it represents a number of organized beliefs focused on a specific object or situation. Attitudes and attitudinal systems are cognitively less central and stem from self-conceptions and values in some respects. Other cognitive subsystems include cognitions about one's own behavior, cognitions about significant others' attitudes, values,

or behavior; and cognitions about the behavior of nonsocial objects. These components of the belief system also occupy a less central position than values and self-conceptions.

The Function of Values and Value Systems

The functional aspect of the cognitive system includes many interrelated processes such as attending, perceiving, remembering, reasoning, evaluating, problem-solving, learning, and conceptualizing. These processes interacting with existing cognitive content and environmental stimuli yield new cognitive products enabling the organism to adapt, survive, and modify the cognitive system itself. Human beings with their advanced conceptual and unique linguistic abilities can enhance their existence by communicating their conceptions with others and formulating conceptions about themselves. While some degree of conceptualization may serve basic survival needs in many species, only in humans can needs achieve systematic representation in cognition as values. These values are employed as cognitive elements in a variety of ways to ultimately satisfy the underlying needs (Rokeach, 1973).

Long-Range Function of Values

Rokeach indicates that all beliefs, including values, ultimately serve the single purpose of maintaining and enhancing self-conception. He uses the term self-conception in the same sense that McDougall (1926) refers to self-regard as the master sentiment, i.e., a collection of beliefs about the self-as-an-object with affective connotations of favorability or unfavorability. To this extent, self-regard

may be viewed cognitively as an attitude or attitudinal system in which the self-as-object is conceptualized and evaluated by the self-as-subject who in turn experiences the affective connotations of these cognitions.

Rokeach indicates that the long-range function of values are to give expression to human needs with maintenance and enhancement of self-regard being paramount, yet reflecting a rubric under which more specific needs may be subsumed. Values are viewed as cognitive transformations and representations of societal needs as well as individual needs. As expression of needs, Rokeach designates three main functions of values: (1) adjustment, (2) ego-defensive, and (3) self-actualization or knowledge. These three functions have been designated by others (Smith, Bruner, & White, 1956) as functions of attitudes. By positing values as more central, Rokeach views these functions as more directly related to values. The adjustment function of values is reflected by any value whose content and realization ensures safety and security in the physical or social environment. The second, ego-defensive function of values is evident when personally or socially unacceptable needs, feelings, or actions are cognitively transformed by defense mechanisms such as rationalization and reaction formation into justified motives and actions supported by accepted values. Helpfulness as an important value for psychotherapists provides an acceptable concept for satisfying voyeuristic desires. The preservation of ethnic purity may permit blatant activities of discrimination and segregation. The most insensitive confrontations between people may masquerade as honesty while

concealing hostile or sadistic impulses. Finally, the self-actualization function of values is reflected in value content aimed at wisdom, personal growth integration, competency, greater knowledge and awareness, and meaningful existence.

Rokeach indicates that an individual's value system may be organized to emphasize one set of functions more than others. The specific organization may reflect a level of development in a person. His level of maturity may be gauged by assessing which functional orientation is dominant among high-ranking values. Some values may be low-ranking by either having diminished in functional relevance (needs which are satisfied) or not yet having acquired importance (needs discovered after more basic ones are satisfied). This conception of the functions of values parallels Maslow's hierarchical theory of motivation and needs (Maslow, 1954). Maslow's conceptions of higher-order B(being)-values and lower-order D(deficiency)-values deal with terminal values for the most part. Terminal values reflect the underlying needs as ends in a fairly straight-forward way and are more likely to indicate an individual's developmental level. Instrumental values may take on new organizational and functional patterns as an individual's maturity level and terminal value system change.

The conception of long-range functions of values embraces most dynamic theories of motivation and personality. The adjustment and self-actualization functions clearly have ties with both humanistic self-theory and cognitive developmental traditions. Kohlberg's (1964) theory of moral development describes increasingly mature (more objective and less subjective) levels of moral reasoning which

at the highest levels reflect fewer adjustment concerns and more patterns of thought and values characterizing self-actualized individuals. The ego-defensive functions stem from psychoanalytic theory and, particularly, the use of values in secondary processes involved in defending the ego against anxiety.

Psychoanalytic theory has not dealt systematically with values other than to locate them structurally within the superego and its subdivisions: conscience and ego-ideal. The conscience reflects an incorporated system of proscriptive beliefs concerning actions related to punishment from parents which now produce guilt if committed, while the ego-ideal represents a system of prescriptive beliefs about actions (or modes of behavior) previously rewarded by parents which now internally give rise to feelings of pride or shame (Hall and Lindzey, 1970). However, as psychoanalytic ego psychology has evolved with a more autonomous conception of ego during the past century, the ego-ideal as a construct has been distinguished from the super-ego and has increasingly been attributed to ego functioning involved in reality testing with flexibility in setting goals for the self (Erikson, 1959). Parallels may be found in Erikson's (1959) eight stages of ego development and other developmental theories in terms of a progression of tasks (needs to be met) leading to one's identity and increasingly mature psychosocial functioning in terms of competence and salient values. It may be hypothesized that failure to resolve any one of the developmental crises may lead to a particular form of psychopathology and a characteristic value system organization reflecting the salient needs for that stage of

development as well as any particular values necessary for ego-defensive purposes. Thus, in psychoanalytic language, we may conceive of values as not only employed in cognitive defense mechanisms such as rationalization, but also reflecting a given level of ego development and any underlying ego deficits. We may speculate that the construct of value as a cognitive derivative of need may be a unifying construct which ultimately will lead to more parallels among diverse personality theories formulated more directly in terms of motivation or need.

Short-Range Function of Values

Rokeach views the short-range function of values as standards to guide ongoing activities and value systems as general plans to resolve conflicts in decision making when values (needs) are in competition with one another. This short-range view of value functions is highly cognitive in presenting values as conceptual tools or criteria that are employed for evaluation purposes in a variety of circumstances. People, objects, issues, activities are simply evaluated or compared in the light of the existing criteria. The resulting cognitive product may be a judgement, an attitude, or a conclusion that some action is preferable to another.

Self-Conception

The construct self has acquired fairly extensive use in many personality theories over the last four decades without achieving any consensus about its definition. It has broadly been considered to be linguistically synonymous with person (Ossorio & Davis, 1968)

used in the special instance when an individual as a subject (who is called "I") identifies that same individual as an object (called "me"). Self has been more narrowly and systematically defined as a differentiated part of the phenomenal field within an individual's personality (Rogers, 1951). Self has been both equated with and differentiated from the construct ego. When differentiated, the ego is regarded as a non-phenomenonal personality construct which includes the cognitive and perceptual processes among its many functions and "knows" the phenomenal self as well as other objects within the phenomenal field (Smith, 1950). Greatest confusion arises in differentiating between the ego and the construct of a non-phenomenal self, inferred self, or unconscious self (Sherif, 1968). The notion of unconscious conceptions, evaluations, and concomitant affective responses existing within an individual toward himself presents many theoretical problems in the development of self-concept theory (Wylie, 1968). While Rogers uses the term self as a noun to designate a construct that is both a structure as well as a process, Wells and Marwell (1976) recommend using the term only as a modifier to signify all reflexive events in which the agent and object of activity are the same person.

Self-Conception as a Structure

The term self-concept (or self-conception as a product of self-conceptualization) in its broadest sense refers to a cognitive system or structure. This term, like the term self, is subject to controversy, but more manageable by assuming a reasonably adequate shared

meaning of the term self. Wylie (1968) uses the term "generic self-concept" to cover the spectrum of self-concept definitions. She suggests a molecular approach in dealing with the construct and recommends maintaining subdivisions of the generic term. A basic distinction is maintained between actual and ideal self-concepts. She further divides the actual self-concept into (1) social self-concepts and (2) private self-concepts. The ideal self-concept is also separated into (1) one's own ideal self-concepts and (2) concepts of other's ideals for one. These four subdivisions are further viewed as multidimensional. The social self-concept includes the multiple roles that individual assumes in relationship to others and his characteristic conceptions of his performance in these roles and the social effects of his behavior. These conceptions about an individual may be formulated by others as well as himself. The term insightfulness is used to reflect the degree of congruence between an individual's social self-concept and those conceptions formulated by others about the person. The actual private self-concept may include many dimensions of self-conceptualization operating within an individual that are not readily accessible to external observers of his social behavior.

Self-Conception as a Process

Self-conception as a cognitive process is also a broad term which has been typically used to refer to two distinct processes, self-evaluation and self-affection, according to Wells and Marwell (1976). They identify three aspects in self-conception:

(1) cognitive, (2) affective, and (3) behavioral. The cognitive aspect includes the "psychological content" of the self-attitude. The affective aspect refers to the "valuation" placed on the content. The behavioral aspect refers to the behavioral responses elicited by or toward the self-object.

Self-Evaluation. Wells and Marwell's reference to the "psychological content" of the self-attitude includes that collection of beliefs about actual self-characteristics as well as beliefs about desirable self-characteristics. This necessarily implies two prerequisite processes to self-evaluation: (1) conceptualization of the actual self and (2) conceptualization of values implicated in ideal-self characteristics. These two processes yield the products or structural content comprising the generic self-concept described by Wylie (1968). As such, it would include all descriptors an individual would use in response to the question "Who am I?" It is clear that this question can potentially elicit factual content, social roles, specification of values, aspirations, attitudes, preferences, existing self-evaluative cognitive products, or any other cognition that a person uses in differentiating self from other social and non-social objects. Thus, self-conception does not start with self-evaluation, but with perception and conceptualization of relatively enduring characteristics of the self and the acquisition of some value criteria.

In a sense, self-evaluation is a higher-order cognitive process which uses products making up the actual self-concept and values to

maintain and generate new cognitive products (self-judgements) and their concomitant affective products. Many self-judgements exist as stable aspects of the actual self-concept and cannot, in principle, exist independently from their affective concomitants. However, defense mechanisms such as dissociation may enable functional separations between cognition and affect within the total personality system. Other defenses may modify the cognitive-affective relationship as well.

Self-Affection. The affective component of self-conception is typically referred to by the term self-esteem. Most definitions of self-esteem view it as a relatively enduring and global experiential characteristic of individuals arising from a multitude of specific self-judgements (Coopersmith, 1967). Self-esteem has been defined and measured in various ways depending on various assumptions about the structure of the self-concept and which processes are relevant. Examination of various conceptions of self-esteem reveals that no simple one-to-one correspondence between self-evaluation and self-esteem can be formulated.

The simplest view of self-esteem is one in which it reflects a measure of overall approval or disapproval toward the self as the referent object considered as a whole (Rosenberg, 1965). This conception does not consider specific dimensions of self-conception and views levels of self-esteem as lying along a single continuum of self-regard with positive and negative poles.

Self-esteem has been equated with the actual self-concept or the collection of adjectives used by a person to describe himself. The positive and negative descriptors in proportion to the total set of descriptors provides a measure of the affective favorability or unfavorability of a person toward himself (Gough & Heilbrun, 1965). This conception of self-esteem may be extended to include some pre-conceived weighting of the characteristics involved, i.e., some values associated with the descriptors such that by summing them some will contribute or detract more than others to the global level of self-esteem. This view of self-esteem assumes a shared value system that is held by both the observer and the subject describing himself.

A refinement of this view of self-esteem which takes individual differences into account is to define self-esteem as a discrepancy between actual self-concept and ideal self-concept (Block, 1961). Measurement of the ideal self-concept would reflect the individual's value system rather than the observer's. This view assumes that the actual self-concept, however favorable or unfavorable by an observer's standards, only generates an affective response as a function of the ideal self-concept and underlying values of the individual. The term <u>self-satisfaction</u> has been employed for self-esteem inferred from measures of self and ideal-self discrepancy (Bills, 1951). It is further assumed that greater congruence between real and ideal self-concepts is associated with better psychological adjustment.

Self-esteem has also been defined in more phenomenal terms in the sense of more directly measuring the feeling arising from self-evaluation (Bills, 1954). The term self-acceptance has been used in preference to self-esteem. Self-acceptance implies that two individuals may have identical actual self-concepts and share the same ideal self-concepts (and value systems), yet react differently to the discrepancies that exist or occur. This conception implies psychological differences among individuals which may either attenuate or intensify feelings of satisfaction and dissatisfaction. Different affective reactions to the same self-evaluation process would have to be attributed to tempermental differences or non-phenomenal processes such as defense mechanisms that are separate from the generic self-concept yet modify its dynamic characteristics.

Self-acceptance may be used in another sense to indicate a characteristic of the self-evaluation process in which an individual may be very aware of discrepancies between real and ideal self-concepts, yet hold other cognitions that modify his affective response. He may view his ideal self-concept as an ideal never-to-be-achieved and have an "aspired" self-concept (Sherwood, 1962) which reflects his realistic strivings and sources of dissatisfaction. In a sense, he is tolerant of and comfortable with many discrepancies between real and ideal self-conceptions. Similarly, he may be less disturbed by discrepancies between social and personal components within either the actual or ideal self-concepts. Values such as inner harmony, self-respect and freedom may reflect goals of an individual to manage and dissipate the negative affect aroused by

discrepancies within and between intrapersonal and interpersonal areas of self-conception. This may be accomplished by increasing one's acceptance of these incongruities or decreasing one's need to comply with the standards of others. In this context, self-acceptance may be regarded as a transformation of basic affective responses to behavior-value conflicts provided the cognitive elements such as self-actualization values are operative. Thus, self-acceptance would be a function of higher-order values modifying the affective response to violations of other values. Self-acceptance would be a function of a particular type of ideal self-concept, in this case, rather than originating from temperamental or non-phenomenal personality processes.

It is clear that the organization of the value system is the foundation for the ideal self-concept as well as for conceptions of ideal-others that an individual may formulate. The question can be raised whether or not the construct of an ideal self-concept is a useful concept in cognitively oriented studies of self-evaluation, since it involves an indirect application of values to self-conceptions. It is more parsimonious to view both the ideal self-concept and self-evaluations (judgements) as cognitive products which primarily arise from values as standards. A clear description of an individual's value system may ultimately be used to identify the salient characteristics or dimensions of the self-concept most likely to generate greatest satisfaction or dissatisfaction as well as identifying higher-order cognitions that modify the affective responses accompanying self-evaluation.

Behavior Mediated by Self-Conception. The behavioral aspect of self-conception denotes the behavioral response or predisposition to the self-as-object in the same manner that behavior is mediated by an attitude formulated toward any other object. Therefore, a person's level of self-esteem is regarded as a significant entering characteristic which must be accounted for in predicting behavior in those situations where the self is a salient object. Some conceptions of self-esteem involve predictions about other behaviors mediated by self-esteem. These formulations consider an individual's tolerance of stress (Ziller, 1969), confidence and level of aspiration in given situations (Diggory, 1966), and tolerance and regard toward others (Berger, 1952) as indicators of self-esteem.

Dynamic Properties of Self-Esteem. Self-esteem has the status of an independent variable with dynamic properties operating within cognition and personality as well as behavior. Rosenberg (1968) has suggested that psychological selectivity enters into situations where ambiguity and the range of options are greatest and especially in self-evaluation. He suggests that values may be selected by the person which maintain and enhance his self-esteem. An ideal self-concept may be formulated which is fairly consistent with the actual self-concept. Thus, a reciprocal relationship may be posited between self-concepts and values with self-esteem at the center operating as both a dependent variable (product of self-evaluation) and an independent variable influencing cognitive selection processes. As a dependent variable, an individual experiences self-esteem as a sense

of worth based on his evaluation of his competence in performing in valued areas (e.g., when his demand on himself exceeds his expectation that he can meet that demand, it results in devaluation of himself as an instrumental object). The joint factors of value and expectancy (self-conception), in this instance, generate self-esteem (worth) and mediate behavior reflecting a level of aspiration consistent with the self-evaluation.

However, as an independent variable, self-worth may be high in the face of low aspiration and limited successes in behavior by altering the criteria of aspiration and worth (values). Also, high self-esteem and high aspiration may occur in the face of consistent behavioral failure, if the expectancy (conception of what one can do) can be maintained consistently high as well. This would require cognitive selection by ignoring, denying, repressing, or distorting actual self-conceptions rather than lowering standards. When self-esteem is maintained through cognitive selection processes effecting either values or self-conceptions, an individual is likely to psychologically be more defensive.

In 1890, William James presented the equation: self-esteem = success/pretension (SE = S/P). When self-esteem is viewed as a dependent variable, the numerator and denominator on the right hand side "objectively" generate a given level of self-regard, i.e., self-esteem equals the ratio of accurate self-conceptions to existing self-values. When self-esteem is viewed as an independent variable with dynamic properties, it may affect (1) specific mediated success

in behavior, (2) perceived success and failure, or (3) the magnitude and organization of self-values.

Wells and Marwell (1976) describe three prevailing models of self-esteem. (1) The "high self-esteem model" simply predicts better adjustment associated with higher levels of self-esteem (SE = S). Self-values would be a fixed variable and, perhaps, one which defines individual success. (2) The "low self-esteem model" posits two basic personality types using different defense mechanisms in dealing with negative information about themselves. The personality types correspond to Byrne's (1961) "repressors" and "sensitizors." Repressors have high self-esteem by distorting self-conceptions (SE = S + defense mechanisms), while sensitizors demonstrate low self-esteem and remain open to negative information (SE = S). The sensitizors, who typically experience more guilt and shame, may actually be more involved in value system struggles and the defensive use of values in rationalizing and intellectualizing. This group's only recourse for enhancing self-esteem is through increased successes or value system change allowing for comfortable integration of negative self-conceptions. (3) The "medium self-esteem model" predicts that maximum adjustment is found in individuals with moderate levels of self-esteem, while at the extremes of measured self-esteem psychopathology is likely to be found. Worchel and McCormick (1963) found that moderate levels of self-esteem are associated with more tolerance of dissonance and better problem-solving skills, while extremely high levels may be associated with narcissism, and extremely low self-esteem with self-rejection.

Wylie (1974) also reports consistent associations between neuroticism and low self-esteem.

It may be postulated that as individuals move to the extreme ends of the self-esteem scale, self-esteem becomes less of a product and more of a determiner of the self-evaluation processes. At low self-esteem levels, reality testing may remain intact while maladjustment reflects adaptations to rigid or demanding values and sensitivities to negative information concerning the self which yield considerable subjective distress. At extremely high levels, greater psychopathology, primitive defense mechanisms, impaired reality testing, and poor social adjustment are likely to be found in the face of relatively little subjective distress. The role of values as criteria used in governing behavior and evaluating oneself may be minimal in extremely disturbed individuals. Values may function more as archaic introjected beliefs, regressed guidelines for behavior, or indicators of deficiencies in need satisfaction.

Cognitive Change

Rokeach (1973) proposes that psychologically significant cognitive change occurs when an individual becomes aware of contradictions within his belief system. However, in contrast to many inconsistency theories, Rokeach does not hold to a simple conception of any two cognitive elements being in inconsistent relationship to one another. He proposes that in every instance of psychologically important cognitive change, the cognitive elements consist of (1) a cognition about oneself and (2) a cognition (or cognitions) about one's total

performance in a given situation. In one sense, the two cognitive elements really involve two types of self-cognitions: (1) a pre-existing, fairly stable conception about oneself and (2) a current, more transient and situationally evoked perception of oneself via one's behavior. Jointly, these cognitions in a given situation have the potential to arouse a state of satisfaction or dissatisfaction. When a state of self-dissatisfaction is aroused, cognitive change may occur and is always directed by one overriding goal: to maintain and, if possible, enhance self-conceptions.

One's total performance in a given situation may include any number of relevant cognitions (e.g., cognitions about one's behavior, a particular attitude, a certain value) involving the 10 cognitive subsystems. These cognitions may or may not be in a consistent relationship with one another. The course of cognitive change is such that any or all of those cognitions which are inconsistent with self-conceptions will undergo change. In the process, the cognitions related to one's performance may be brought into a logically consistent relationship or may become more inconsistent with one another. A simple example might be depicted as a triad of cognitions involving a self-conception A, a value B, and an attitude C elicited in a situation. If A, B, and C are all consistent no change would be expected. If A is consistent with B and C, while B and C are inconsistent, no self-dissatisfaction and "psychologically important" change would be expected. If A is inconsistent with C, but not B, C will change in a direction consistent with A regardless of the degree of consistency between B and C initially or after C changes.

If B and C are both inconsistent with A, both will change in a direction consistent with A. At first glance it may seem absurd that a person may sacrifice internal consistency among beliefs to accommodate self-conceptions. However, most counselors can attest to the frequency with which their clients express contradictory beliefs, irrational conclusions, and clear-cut delusions.

Rokeach views self-dissatisfaction (an affective experience) as the determinant of change. He distinguishes between self-dissatisfaction as a situationally determined phenomenon and self-esteem as a fairly stable characteristic of an individual. Rokeach also distinguishes between general and specific sources of self-dissatisfaction. These sources reflect the degree of discriminations a person is able to make about specific aspects of performance contradicting self-conceptions and contributing to the state of self-dissatisfaction. He also refers to a diffuse state of self-dissatisfaction without defining it. The implication is that self-dissatisfaction may be aroused by unspecified sources in a situation and persist without identification and resolution in the underlying cognitive contradictions. He appears to suggest that this type of affective state is independent of self-esteem, but a mutual contributor to an individual's affective state.

Rokeach notes that not all self-dissatisfaction leads to cognitive change and that defense mechanisms may be employed at various points to avoid the arousal of self-dissatisfaction, suppress the affect or cognitive contradiction in some way, or even resolve the contradiction by employing additional cognitions that negate or

rationalize away contradictions. At present, existing theory is a long way from integrating ego-defensive cognitive processes with the theories of cognitive consistency and self-evaluation.

Self-dissatisfaction is most likely to occur when the cognition of one's performance in a given situation contradicts a stable self-conception or characteristic ascribed to oneself and valued by that individual. In most situations, instrumental values are likely to be most directly related to induced states of dissatisfaction because they represent the standards used to assess one's competence and morality (worth as an instrumental object). Terminal values may ultimately be implicated in instances of self-dissatisfaction because of their functional relationship to instrumental values, even though terminal values are less likely to be directly implicated in the day-to-day situations in which an individual is continuously evaluating his performance.

Distinguishing Between Processes of Cognitive Consistency and Enhancement of Self-Esteem

Rokeach's model of inconsistency is not fundamentally different from Festinger's (1964) most current formulation of dissonance theory. Festinger viewed the degree of total experienced dissonance as a function of the importance placed on cognitive elements involved and the proportion of relevant dissonant relations. Since cognitive elements related to the self are expected to carry greatest importance or weight, experiences of greatest cognitive dissonance are likely to involve self-percepts. In a sense, the self is the highest

value, weighting all self-cognitions more importantly than other cognitions. The empirical studies of cognitive dissonance have been restricted to cognitive relationships involving a self-percept as one cognitive element and have consequently restricted the theory to this domain as well (Smith, 1968). Further extension of the theory would necessarily require value system concepts as a source for weighting cognitions not pertaining to self, yet involved in dissonant relationships. M. Brewster Smith (1969) has stated that two basic processes need to be distinguished: (1) the trend toward cognitive consistency and (2) the trend to maintain and enhance self-esteem. These processes are independent, although the second is likely to take precedence over and alter the former when self-cognitions are involved (Rosenberg, 1968). That is, self-evaluation and self-esteem processes are dynamically stronger than strivings toward cognitive consistency. It may be possible to extend this further and postulate that all evaluation processes are stronger than basic consistency strivings with evaluation of self-as-object being strongest.

The most parsimonious conception would equate affective experiences of consonance with satisfaction and dissonance with dissatisfaction. Furthermore, these experiences would be concomitants of all cognitive evaluative processes regardless of object and relevant values involved. Inconsistencies elicited by evaluation of non-self objects would generate lower magnitudes of dissonance than those aroused by self-evaluation. Such a formulation would not distinguish between the two processes of (1) cognitive consistency

and (2) maintenance of self-esteem, but rather posit one process occurring with varying intensity as a function of values and objects involved.

It may be argued that Rokeach's theory of values and cognitive change is restricted only to that class of events that involve a conception of the self-as-an-object and affective responses toward the self. It excludes cognitive change and learning involving values that may occur independent of self-conceptions from the realm of psychological importance. As such, his theory suggests that dissatisfaction with non-self objects does not lead to cognitive changes of any psychological importance.

A second weakness in Rokeach's formulations may be found in his superficial treatment of the constructs of self-conception and self-esteem. Since self-conception is central to his conception of change, its relationship to values needs further articulation. Rokeach gives no indication of whether he subscribes to the traditional notion of an ideal self-concept as a structural part of the self-concept and a component of self-esteem. Since beliefs such as values and products of evaluation (attitudes) may also be viewed as possessions of an individual, they also answer the question "Who am I?" which Rokeach takes to mean self-conception. If self-conceptions and values are to be viewed as separate categories or systems of cognition, then Rokeach will ultimately need to narrow his definition of self-conception and formulate the relationships between values, self-conceptions, and self-esteem as independent constructs. Certain values may be more salient contributors to self-esteem than others in

the sense of being standards with even greater stability and resistance to change than self-conceptions. Such values would consistently contribute to low self-esteem if the individual's self-conception falls short. Conversely, some values may be intrinsically less stable and easily subscribed to because they fit existing self-conceptions and ultimately generate greater self-esteem.

In viewing cognitive change, Rokeach has conceived of values as cognitions that operate as dependent variables when in a conflictual relationship with self-conceptions. The pre-existing interrelationships of self-conceptions and values as independent variables contributing to self-esteem is not developed. Nor is the dynamic role of self-esteem as an entering characteristic and independent variable affecting the change process considered.

Early Value Education Studies Using the Rokeach Model

One of the earliest value education experiments by Rokeach was conducted in 1968 using two subpopulations of Michigan State University freshmen: those enrolled in James Madison College (emphasizing social science interests) and those enrolled in Lyman Briggs College (natural sciences). The basic experiment was essentially two replications on these populations. A total of 366 subjects were involved from 19 classroom units (8 control and 11 experimental).

One week prior to experimental intervention, all subjects were pretested to measure three attitudes: equal rights for blacks, equal rights for people generally, and America's presence in Vietnam. The

following week, immediately prior to the experimental intevention, the subjects' values were pretested by having them rank order the 18 terminal values which included freedom and equality. All subjects were then asked to rank the 18 values as they thought the average MSU student would.

The basic experimental intervention (which excluded subjects in control classrooms) proceeded primarily as follows. (1) Subjects were then shown "Table 1" which depicted composite rankings for MSU students on the 18 values. (2) The experimenter pointed out that the typical student ranked freedom number 1, but ranked equality number 11. (3) To arouse self-dissatisfaction, the experimenter suggested that students in general are more interested in freedom for themselves than for others. (4) Subjects were asked to indicate their level of sympathy and involvement with civil rights demonstrations. (5) To arouse further self-dissatisfaction, subjects were then shown "Table 2" which indicated that students fell into three groups: (a) civil rights "participants" who ranked freedom 6 and equality 5, (b) "sympathizers" who ranked freedom 1 and equality 11, and (c) "non-sympathizers" who ranked freedom 2 and equality 17. (6) The experimenter interpreted "Table 2" as again indicating that people who are against civil rights care only about their own freedom. (7) Subjects' reactions to the treatment were then assessed by having them respond to items measuring their agreement with the experimenter's interpretation, their level of ego-involvement in the treatment, and general level of satisfaction with their rankings.

All subjects were posttested at 3 weeks, 3-5 months, and 15-17 months on their values and attitudes toward equal rights and Vietnam. In a very unobtrusive manner, all subjects were contacted by the NAACP 3-5 months after intervention and invited to join the organization. At 15-17 months they were again asked to join or renew their membership.

Rokeach found significant increases in rankings of equality for experimental subjects across time on all three posttests of values and no significant changes for control subjects. He found that experimental subjects exhibited significant increased favorable attitude toward equal rights for blacks at 3-5 months and 15-17 months in contrast to control subjects. He also found a significantly higher incidence of positive responses to the NAACP solicitations at 3-5 months and 15-17 months.

Rokeach concluded that his data support his conception of value change generated by self-dissatisfaction and that such change is enduring. Furthermore, the change in equal-rights attitude at 3-5 months reflects a repercussive character in cognitive change to less central beliefs which, although delayed, ultimately brings them into consistency with self-conceptions and relevant values. The behavioral response to NAACP solicitation coinciding with attitude change presumably demonstrated mediating effects of value change to attitude change and ultimately to behavior change.

The methodology of Rokeach's study and its underlying theoretical formulations have acquired paradigmatic status (Zenzen & Hammer, 1978) and have been the basis for numerous studies during the past

decade. Penner (1971) found similar results in a replication of Rokeach's study and additionally found that white experimental subjects exhibit more eye contact with black laboratory partners three months after treatment than control subjects. In a replication by Cochrane and Kelly (1971), similar findings were obtained at 5 to 8 weeks and found to be unrelated to any of 19 personality measures obtained on the subjects. In another replication, Rokeach and McLellan (1972) found that similar results were obtained even if subjects were given only information about others and not about themselves. McLellan (1973) found that the experimenter's interpretations of Tables 1 and 2 in the basic treatment were essential factors in producing change. Hollen (1972) investigated the value labeled a world of beauty. He found that significant increases in rank importance could be induced by giving subjects information that young people and better-educated people place more importance on this value than the general public. He further demonstrated that increased rankings on that value led to more favorable ecological attitudes toward highway beautification and placing bans on non-returnable containers and cars in cities. In a study aimed at quitting smoking (Conroy, Katkin, & Barnette, 1973), the researchers gave experimental subjects information showing the "smokers" ranked broadminded 3rd and self-disciplined 8th, while "quitters" ranked self-disciplined 1st and broadminded 8th. Experimental subjects significantly increased their rankings of self-discipline over a 2 to 3 week period following treatment and were able to maintain a very consistently low level of cigarette consumption over a 16 day

period. Control subjects exhibited an initial reduction in consumption with steadily increasing consumption over the same period.

Value Education and the Present Study

Value education, in this study as in the earlier studies, is broadly defined as a process of giving individuals information about aspects of their own value-system organization and some implications of a target value relevant to self-conceptions. This process is presumed to have the potential to induce self-dissatisfaction and subsequent cognitive changes in value system organization if the individual becomes aware of any existing inconsistency between the value and his self-conception. Indirect or repercussive effects of value change are expected to occur throughout the cognitive system.

The present study of value change differs from earlier studies in a number of important ways. First, it is conducted with a psychiatric inpatient population. Second, it is aimed at identifying and modifying values which are most likely to be implicated in psychological functioning. Third, it considers the possibility that some values may have an optimal level of importance in relationship to other values. Fourth, it considers alternative indirect measures of value change. These include methods of value measurement based on multiple items reflecting specific attitudes related to the value. Finally, it considers the repercussive effects of value change on self-regard using multiple measures.

Summary of the Major Theoretical Assumptions Underlying the Present Study

The major theoretical formulations discussed in this chapter which provide the rationale for the present study are summarized in the five paragraphs below.

1. While all values, as beliefs held by individuals, have a functional relationship to self-conceptions, some values are more likely than others to serve as mediators in maintaining or enhancing an individual's level of self-regard and effective psychological functioning. Some instrumental values are likely to have a highly salient role in ongoing self-evaluations of competence and moral or social worth. Certain terminal values are likely to have salient effects on self-evaluation in more indirect ways; either as mediators of instrumental values or as abstract representations of strivings in which self-esteem as an end in itself may vary in importance from one individual to another. Some terminal value systems may reflect states of maturity in which individuals are less vulnerable (more accepting) when assaults on self-esteem are experienced.

2. Identification of those values involved in impaired psychological functioning may be accomplished by the empirical study of the course of value changes within psychiatric populations. Presumably, psychotherapeutic treatment in many instances is explicitly aimed at modifying and enhancing self-conceptions which in turn mediate value change. Psychotherapy may involve many implicit efforts to promote the importance of certain values as well.

3. The direct modification of significant values using value education techniques is likely to be a useful adjunct to psychotherapy. Value education would enable patients to more clearly articulate sources of psychological conflict at a cognitive level, revise their belief system, and ultimately enhance their level of self-regard.

4. The modification of values through value education may be manifested in many ways. At the most general level, change in a value may result in a higher rank placement and salience of that value within the value system hierarchy. However, certain values may be psychologically important, yet be excessively salient in relationship to other values. In such cases, modification of the value may involve a redefinition or greater differentiation of the substantive meaning of value and a decrease to some optimal level of placement within the value hierarchy. A value change may be further manifested by mediating changes in attitudes related to specific objects or situations having a functional relationship to the value. Value change should be reflected by multiple-item and unobtrusive measures of the value based on specific related attitudes as well as by changes in rank ordering. (A value change may effect one related attitude more favorably than another. This would reflect a change, not only in importance, but of meaning or domain in which the value is deployed. To posit an unidirectional change in a value and <u>all</u> related attitudes is highly simplistic and ultimately of little use in value theory.)

5. While dissatisfaction generated by a perceived inconsistency between a value and self-conception is viewed as the mechanism for psychologically important value change, the reciprocal mechanisms mediating enhanced self-regard as a function of value change have not been formulated. It may be argued that delayed repercussive effects of value change may be found in the attitudinal system of an individual toward himself as an object, similar in kind, but more salient than the change process in attitudes toward non-self objects. Reorganization of important instrumental values at a psychologically more mature level will lead to new modes of self-appraisal on a day-to-day basis with an accumulative effect of more specific experiences of self-satisfaction and fewer instances of dissatisfaction. In addition, increased clarity and commitment to one's values leads to greater awareness and a sense of mastery and control over one's life on a day-to-day basis. Reorganization of important terminal values at a psychologically more mature level will lead to a clearer sense of ultimate purpose, integration, and identity within an individual. This would free him from both internal and external demands to conform to rigid norms or expectations that may be both unnecessary sources of self-dissatisfaction and at variance with his strivings toward realization of greater potentials within himself. The ultimate test of value education will rest on such outcomes and their behavioral manifestation in more effective personal and social functioning.

CHAPTER III

EMPIRICAL BACKGROUND PROVIDED BY THE PILOT STUDY

Purpose of the Pilot Study

Any effort to design an effective value education procedure according to Rokeach's model has at least two prerequisites. First, it is necessary to identify a relevant target value on logical or empirical grounds. Second, it is necessary to establish a data base which maps some important relationship(s) between the target value and other cognitive elements. The pilot study reported in this chapter was needed to identify the target values and to provide the empirical basis on which to construct the experimental value education exercises (treatments) used in the later phase of this investigation.

The purpose of the pilot study was to identify values that are psychologically important for a group of adult psychiatric inpatients. The sets of values considered were the 18 terminal values and the 18 instrumental values measured by the Value Survey (Rokeach, 1967). Those values identified as psychologically important were further studied in relationship to patients' other values, psychopathology, behavior patterns, length of hospitalization, and clinical status one year after hospitalization.

Primary Constructs and Assumptions Underlying the Pilot Study

Psychologically Significant Values

Most values are likely to have some degree of general psychological significance as well as specific significance based on individual differences among people. This study operationally defines a psychologically significant value as one increasing in rank importance across a group of individuals when temporally associated with the clinical treatment and improved functioning of the group members. It is assumed that the group initially undersubscribes to the particular value and that the value is differentially promoted in various ways within the hospital milieu and treatment program.

This conception of a psychologically important value differs from an equally viable one based on the concept of deficiency needs (Maslow, 1954). To the extent that values reflect transformations of needs, those underlying needs which are unmet or frustrated should find expression in high ranking values. These values should decrease in rank importance once those needs are securely met and the individual is functioning at a level of greater psychological maturity. It was assumed that value changes related to deficiency motivation reflect developmental processes occurring over a relatively long time span with less involvement in immediate and conscious cognitive processes. As such, measurable changes in those values were not expected during the course of short-term intensive inpatient treatment.

Values that lend themselves to fairly rapid change are expected to have characteristics of easy involvement in conscious cognition processes and immediate relevance to the day-to-day performance of individuals. Consistent with this expectation, terminal values with an emphasis on more remote end states may have less relevance than instrumental values which guide day-to-day behavior. It is expected that personal terminal values (as desirable end states which an individual holds primarily for himself) are likely to carry greater importance in the individual's intrapsychic functioning than terminal values with an interpersonal focus.

Instrumental values have been classified into two categories designated as either competence values or moral values. Since an individual's evaluation of his ongoing performance and sense of worth will revolve around self-conceptions of his "goodness" (moral values) and "greatness" (competence values), instrumental values might generally be expected to vary in terms of their relative preoccupation with morality or competence as manifest in feelings of guilt or inadequacy. To the extent that moral values have characteristics of "ought" with strong social sanctions, they are likely to be more stable and resistive to change than competence values. Competence values are likely to show greater individual differences about preferred modes of behavior. As standards of adequacy held by a particular individual, these competence values are likely to carry greatest psychological significance for each individual.

The classification of a value as terminal or instrumental, personal, social, moral or competence may have implications concerning

its psychological importance. However, the substantive character or meaning of a specific value for an individual ultimately determines its cognitive-psychological importance. A given value may vary in semantic aspects, clarity, and implications within the belief systems of different individuals. At the same time, it is assumed that any given value has sufficient universality in meaning and psychological significance that it can profitably be isolated and studied by group methods and yet have clear implications for the cognitive and psychological functioning of individuals.

Target Values

The term target value is used to denote a psychologically important value that has been selected as a target for change via value education. The criteria for selection of target values in the pilot study reflect some of the assumptions about psychological significance discussed above. Those criteria used in this study are determined by a twofold objective: to isolate those values with greatest psychological implications for the greatest number of individuals within the inpatient group.

The specific empirical and logical criteria for selection were as follows:

1. A target value would demonstrate a consistent increase in rankings across a majority of the inpatient group from time of admission to discharge.

2. A target value would be sufficiently universal to exhibit relevance for both male and female patients.

3. A target value may be either a terminal or instrumental value, and classified as personal, social, moral, or competence. However, the face validity of a specific value as reflected by its content and implications would provide logical support for its psychological relevance.

4. Two terminal values and two instrumental values would be the numerical limit of values to be used in the second, experimental phase of this investigation.

5. Each target value would further exhibit psychological relevance through a network of empirical and convergent relationships which reflect an association between the value's level of importance and a patient's level of psychological functioning.

Mapping Relationships Between Target Values and Other Patient Characteristics

In order to establish the psychological significance of a target value, its relationship to clinically significant constructs also needed to be demonstrated. These relationships further were required to converge into a consistent logical network centered around the target value and amplifying its significance. In addition to providing a base for interpreting the significance of a target value, such empirically established relationships ultimately provided the subject matter for value education.

Each target value was examined from two perspectives. First, the ranking of a target value upon admission to the hospital was considered to be an entering characteristic of the patient. Second, the ranking of a target value at discharge was considered to be an

outcome variable associated with the treatment process. As such target values were examined in relationship to other entering characteristics and outcome variables associated with the patient population.

Each target value isolated in this study was examined in relationship to a number of variables within five areas designated as follows:

1. other terminal and instrumental values,
2. psychopathological characteristics of patients,
3. observed behavior patterns during hospitalization,
4. duration of hospitalization, and
5. the clinical status of patients one year after hospitalization.

Organization of the Value Systems. Rokeach indicates that the value system as a whole includes many functional relationships both within and between the terminal and instrumental subsystems. The distinction between terminal and instrumental is not clearcut. One or more instrumental values may be instrumental in attaining another instrumental value or a terminal value. A terminal value can be instrumental in the attainment of other terminal values. The organization of the value system in relationship to a target value was considered important in defining the significance of the target value within the value system upon entering the hospital and upon leaving.

Values and Psychopathology. Any target value regarded as psychologically important should demonstrate correlations between

its level of importance and personality measures reflecting continua of healthy to disturbed functioning. If the value has sufficient implications for psychopathology it should manifest a relationship to clinical diagnoses as well.

Values and Behavior. Rokeach has emphasized the antecedent role of values in mediating behavior. The psychological validity of a target value should as a minimum be demonstrated by its consistent association with observable behavior patterns. Ultimately, value change should be accompanied by behavior change. The pilot study examined patient behavior patterns in the hospital milieu and their relationship to target values.

Values and Length of Hospitalization. The duration of hospitalization for a given patient is often multidetermined. Relevant factors may include such things as the severity of disturbance, the capacity to function outside of the hospital, patient motivation, response to treatment, financial resources, adequacy of medical insurance, variations among therapists in treatment approach, and even the availability of alternative placements or programs when continued hospitalization is contraindicated. The pilot study examined this variable to determine whether or not patients' values are correlated with length of stay.

Values and Long-Term Implications on Patient Functioning. Value theory emphasizes the relative stability of values over time. Rokeach has demonstrated long-term behavioral change in response to

value change. The psychological and clinical relevance of values and value changes should extend beyond the period of hospitalization. The pilot study addressed this problem with several longitudinal objectives. These objectives were to examine the long-range implications of values as entering and outcome variables in predicting patient status one year after hospitalization. The patient's involvement in treatment at that time, his progress after leaving the hospital, and the predicted likelihood of hospitalization in the future were examined.

Specific Objectives

The specific objectives of the pilot study are outlined below under seven major headings as follows: (1) Identifying psychologically important values, (2) Isolating target values, (3) Relationship of target values and other values, (4) Relationship of target values and psychopathology, (5) Relationship of target values and observed behavior, (6) Relationship of target values and length of hospitalization, and (7) Relationship of target values and patient status one-year post-hospitalization.

Identifying Psychologically Important Values

Objective 1. The first objective was to identify terminal values exhibiting a significant increase in rank order from time of admission to discharge. It was predicted that significant increases would be found among values with a personal rather than a social emphasis. Among the personal values, those most relevant to

self-evaluation, self-satisfaction or self-conception were expected to exhibit greatest psychological significance.

Objective 2. The second objective was to identify instrumental values exhibited a significant increase in rank order from time of admission to discharge. It was predicted that significant increases would be found among those values with a focus on competence and personal characteristics associated with the broad concept of self-actualization.

Isolating Target Values

Objective 3. The third objective was to examine the values identified by Objectives 1 and 2 and isolate those values exhibiting relevance for both males and females. Increased rankings for at least 50 percent of both groups was the designated criterion for potential target values.

Objective 4. The fourth objective was to designate two terminal and two instrumental values as target values. This designation was based on selection of those values presumed to be most salient in psychological functioning as suggested by face validity and any greater magnitude or frequency of rank increase for one value in comparison to others.

Relationship of Target Values and Other Values

Objective 5. The fifth objective was to identify all significant intercorrelations between target values and other values within

the terminal value system both at the time of admission and discharge.

Objective 6. The sixth objective was to identify all significant intercorrelations between target values and other values within the instrumental value system both at the time of admission and at discharge.

Relationship of Target Values and Psychopathology

Objective 7. Significant correlations between the target values and personality characteristics measured by the MMPI both at the time of admission and discharge were to be identified.

Objective 8. A comparison of target value rankings for non-psychotic and psychotic patients at the time of admission and discharge was made to determine whether differential importance in values is reflected in patient diagnosis.

Relationship of Target Values and Observed Behavior

Objective 9. Significant relationships were to be identified between target value rankings and staff observations of behavior patterns on admission and discharge. The behavioral variables were designated as motility (activity level), affect (mood), cooperation, communication, and total adjustment. (Correlations were based on only admission or only discharge data.)

Relationship of Target Values and Length of Hospitalization

Objective 10. Significant relationships between target value rankings on admission and discharge and duration of hospitalization were to be identified.

Relationship of Target Values to Patient Status One-Year after Hospitalization

Objective 11. Those patients in aftercare and those not in aftercare one year after hospitalization were to be compared to identify differences in their target value rankings upon admission and discharge.

Objective 12. Those patients rated by their therapists as either "improved" or "unimproved" one year following discharge were to be compared on admission rankings of target values and on discharge rankings.

Objective 13. One year after hospitalization, each therapist was asked to indicate his expectation of the likelihood of each of his patients requiring future psychiatric hospitalization. The relationships between these predictions and target value rankings upon admission and discharge were to be examined.

Procedures

Subjects

The subjects for the pilot study were 22 male and 36 female patients admitted to a private psychiatric hospital in Grand Rapids, Michigan over a seven week period. Their ages ranged from 18 to 69

with a mean of 36.1 years. The entire age range was well represented through age 54 with only three subjects beyond the age of 55. Thirty-one percent of the sample resided in the country where the hospital was located. Another 31 percent came from neighboring counties; 22 percent came from other parts of Michigan; 16 percent of the sample came from other states and Canada.

The sample reflected relatively high formal education with a mean grade level of 12.5 years. Education ranged from subjects who completed grade seven to those with graduate degrees. Nineteen percent of the subjects did not complete high school; 51 percent terminated their formal education upon graduation from high school; 17 percent had one to three years of education beyond high school adn 14 percent held bachelor or graduate degrees.

Sixty-eight percent of the patients were married; 21 percent were single; and 12 percent were widowed or divorced. Forty percent of the sample listed their employment status as "housewife." Of the remaining patients, 29 percent indicated that they had been holding a specific job for two or more years; 19 percent were employed in a job which they had held for one year or less. The remaining 12 percent included students and unemployed persons.

The religious affiliations of the patients indicated that 83 percent of the sample were Protestant, 12 percent were Catholic, and 5 percent had no affiliation. Thirty-six percent of the patients were affiliated with two specific Protestant denominations which historically founded the hospital and contributed financially to its operation and development.

The patient group represented a variety of diagnostic categories. Thirty-six percent were diagnosed as exhibiting a neurosis, typically the depressive type. Fifty-four percent were diagnosed as exhibiting a psychosis, primarily including various types of manic-depressive illness or schizophrenia and psychotic depressive reactions. Another 12 percent carried other diagnoses such as one of the personality disorders. The average length of hospitalization for patients in the sample was 5.5 weeks with a range from 1.5 weeks to 14 weeks. Eighty-three percent of the sample were admitted for the first time to this particular hospital and, for most, it represented their first psychiatric hospitalization.

The number of patients in the pilot study was about 10 percent of the patients admitted to the adult intensive treatment program in any one-year period. The characteristics of this sample are fairly typical of patients admitted in recent years.

Measures

Value Survey. The Value Survey developed by Rokeach (1967) was selected because of its close relationship to the value theory formulated by Rokeach. The Value Survey is the most comprehensive and broadly applicable instrument currently available for measuring values and value systems. It consists of two sets of values: a sample of 18 terminal values and a sample of 18 instrumental values (see Appendix A). The values were selected on conceptual and empirical grounds to provide the most representation possible by 18 distinct values within each of the two value systems.

The Value Survey requires that respondents rank the 18 terminal values from most to least important. Form D of the Value Survey was used in this study as it facilitates the ranking task by providing gummed labels on which the values are printed. These labels can be easily moved from one position to another until the respondent has vertically arranged all of the values from rectangular boxes numbered 1 on top down to 18 on the bottom. After ranking the terminal values, the respondent is directed to do the same with the set of 18 instrumental values.

Extensive research has been done with the Value Survey by both Rokeach (1973) and Feather (1975). These investigators provide considerable data related to the validity of the survey as well as norms associated with various groups differing in sex, age, ethnic background, religious and political persuasion, and other characteristics. These investigators report median test-retest reliability coefficients on the terminal value system as high as .80 on Form D over a time span of about one month down to .60 after two and one-half years. The reliability coefficients for single terminal values range from about .40 to .88 with median values of .63 or higher in 5-week test-retest studies. Reliability coefficients for the instrumental value system range from .70 when tested after five weeks to .51 after two and one-half years. Single instrumental values exhibit test-retest coefficients ranging from .37 to .76 with a median of .56 after five weeks.

Minnesota Multiphasic Personality Inventory. The MMPI was selected because of its extensive research background and widespread use as a major assessment and diagnostic tool in clinical settings. The MMPI consists of 566 true-false items which were empirically determined to differentiate various clinical groups from normal individuals. The basic MMPI scales included four validity scales and ten clinical scales. The validity scales are primarily used to examine response set, although they frequently have clinical implications. Three validity scales and nine clinical scales are included in this pilot study and reflect various personality characteristics in clinical terms. Among the validity scales, the L Scale measures tendencies to cover-up minor faults. The F Scale measures deviation from typical response direction on a number of items and reflects such things as the severity of disturbance, exaggeration of difficultires, or lack of cooperation. The K Scale measures defensiveness in admitting to psychological difficulties when scores are highly elevated, while reflecting characteristics of adaptiveness and ego strength at moderate elevations.

The names of nine clinical scales included in this study indicate some of the clinical groups used in development of the MMPI. The clinical scales are designated hypochondriasis, depression, hysteria, psychopathic deviate, paranoia, psychasthenia, schizophrenia, hypomania, and social introversion. While these terms are diagnostic (and in some cases archaic), the scales do measure fairly definable personality characteristics.

MACC Behavioral Adjustment Scale. This scale was selected because of its usefulness in providing an accurate assessment of various aspects of behavioral adjustment in the hospital setting. The scale consists of ratings in four behavioral adjustment areas designated: Motility, Affect, Cooperation, and Communication. A Total Adjustment score is also computed from the sum of the last three areas. The scale has been shown to be a valid measure of clinical improvement with an inter-rater reliability coefficient of .89 (Ellsworth, 1957).

Measuring Patient Aftercare Status. Information related to the status of patients one year after the onset of the study was obtained from each patient's primary therapist by means of a brief survey. This survey requested information about (1) the patient's involvement in aftercare, (2) the patient's current functioning compared to time of discharge, and (3) the therapist's expectation of the patient requiring future hospitalization.

Program of Data Collection

The following is a description of the step-by-step procedures in which all testing, surveys, and other aspects of data collection were completed.

1. All patients were scheduled to complete the Value Survey and the Minnesota Multiphasic Personality Inventory within five days following admission. These were administered along with any other written psychological tests ordered for each patient following the usual clinical procedures.

2. Within the first week of each patient's hospitalization, one of the on-duty nursing staff working closely with the patient was requested to complete the MACC Behavioral Adjustment Scale.

3. Within five days prior to discharge, each patient was scheduled for a second administration of the Value Survey and the MMPI.

4. At the time of each patient's discharge, one of the on-duty nursing staff was requested to rate the patient's current behavior on the MACC Behavioral Adjustment Scale.

5. Following each patient's discharge, all necessary demographic data, discharge diagnosis, and length of hospitalization were obtained from the medical record which is maintained on each patient.

6. One year following the onset of the pilot study, the primary therapist for each patient in study was surveyed to determine (a) whether the patient was being followed on an aftercare basis, (b) whether the patient has continued to improve since hospitalization, and (c) the therapist's expectation of the patient requiring hospitalization in the future.

Analysis of Data

The preliminary analysis of the data in the study was essentially correlational and utilized common parametric statistical techniques. Rokeach (1973) has indicated that analyses involving the rank-ordered values can appropriately use these techniques when small samples are involved. In addition, the degree of nonindependence when making comparisons across individuals is minimal (an average intercorrelation of -.06) when as many as 18 values are involved.

The comparison of increases in mean ranks from admission to discharge for the terminal and instrumental values utilized a liberal (P = .10) one-tailed t-test for dependent samples. All relationships between target values and other variables were identified by computation of the Pearson product-moment correlation coefficient. All coefficients which are significant at the .07 level (.06 for correlations among values) were retained and examined in relationship to the target values. Comparison of the various patient subgroups on target value mean ranks utilized the t-test for independent samples and a significance level of .07 in a two-tailed test. The significance level of .07 was chosen (in preference to a traditional level of .05) to decrease the probability of a Type II error and ensure that a sufficient data base would be available for constructing the value education exercises. A significance level of .06 was used for correlations among values since the ranking procedure spuriously inflates the coefficients to a slight degree.

Analyses were conducted to examine relationships among data obtained on admission and discharge separately. This approach was used to develop separate profiles of the entering patient and outgoing patient.

Pilot Study Results

The results of the pilot study are presented below in the same sequence as the 13 objectives outlined earlier. In a section following this presentation of results, the results will be summarized separately for each identified target value.

Psychologically Important Values

Objective 1 was to identify important terminal values for the patient population. Examination of terminal value changes resulted in the identification of self-respect, freedom and pleasure as potential target values. These three values exhibited significant increases in mean ranking from admission to discharge (Table 3.1).

Objective 2 was to identify important instrumental values. Only two of the values, responsible and self-controlled, increased in sufficient magnitude to be retained as potential target values (Table 3.1).

TABLE 3.1.--Mean Ranks of Selected Terminal and Instrumental Values on Admission and Discharge for 58 Adult Inpatients.

Values	Mean Rank		Change	Significance*
	Admission	Discharge		
Terminal Values				
Self-respect	6.52	5.77	0.75	.07
Freedom	10.01	9.07	0.94	.09
Pleasure	12.77	11.85	0.91	.05
Instrumental Values				
Responsible	7.09	5.69	1.39	.03
Self-controlled	9.71	8.20	1.50	.02

*One-tailed t-test on dependent measures.

Isolating Target Values

Objective 3, following the identification of potential target values, was to establish relevance for both sexes. The minimum criterion for retaining a value is that 50 percent of both sexes increase in discharge rankings. Table 3.2 gives the percentage of patients in each sex group exhibiting increased rankings. Each of the five values meets this criterion for consideration as a target value.

TABLE 3.2.--Percentage of Male and Female Patients with Rank Increases at Discharge on Five Values.

	Sex	
Potential Target Value	Male	Female
Self-respect	61.9	50.0
Freedom	61.9	58.3
Pleasure	52.4	52.8
Responsible	63.2	58.8
Self-Controlled	63.2	52.9

Objective 4 was to designate as target values two terminal and two instrumental values. Since only two instrumental values met the first two criteria, no elimination of instrumental values is needed. However, one of the three terminal values needed to be eliminated. It was concluded that self-respect should be retained as a terminal

target value because of its obvious implications for self-evaluation. Freedom is retained in preference to pleasure because of the greater number of increases in both sex groups and particularly females.

Relationships Between Target Values and Other Values

Objective 5 was to identify significant relationships between each target value and other values within the terminal value system at the time of admission and at the time of discharge. Table 3.3 gives only those correlation coefficients significant at the .06 level or higher between each of the four target values and the 18 terminal values at admission (pre) and discharge (post).

Objective 6 was to identify the significant relationships between each target value and other values within the instrumental value system at the beginning of hospitalization and at discharge. All correlation coefficients significant at the .06 level or higher are presented in Table 3.4.

Relationship of Target Values and Psychopathology

Objective 7 was to identify entering and outcome relationships between each target value and MMPI scales using only admission data and then discharge data. All correlation coefficients significant at the .07 level or higher are presented in Table 3.5. With the exception of scales L and K, negative correlations indicate an association between high ranks and increased psychopathology on any given MMPI scale. Positive correlations associate high ranks with less personality dysfunction.

TABLE 3.3.--Significant Intercorrelations of Target Values and 18 Terminal Values on Admission (Pre) and Discharge (Post).*

	Target Value							
	Freedom		Self-Respect		Responsible		Self-Controlled	
Terminal Value	Pre	Post	Pre	Post	Pre	Post	Pre	Post
A Comfortable Life				-.31				-.25
An Exciting Life		.28						
A Sense of Accomplishment								
A World at Peace			-.21	-.20		-.26		
A World of Beauty		-.35	-.29					
Equality	.23							
Family Security		-.24	-.23					
Freedom							.27	-.23
Happiness	-.28						-.22	-.24
Inner Harmony				.42				.22
Mature Love				.36		.29		
National Security			-.31	-.27				
Pleasure	-.21			-.50				
Salvation	-.23	-.54						.23
Self-Respect								
Social Recognition	-.26		.21			.31		
True Friendship		-.28						
Wisdom				.22				

*All correlation coefficients significant at P equal or less than .06.

TABLE 3.4.--Significant Intercorrelations of Target Values and 18 Instrumental Values on Admission (Pre) and Discharge (Post).*

	Target Value							
	Freedom		Self-Respect		Responsible		Self-Controlled	
Instrumental Value	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Ambitious		.21					-.30	
Broadminded		.22			-.42			
Capable	-.24						-.28	-.26
Cheerful						-.30	-.26	-.28
Clean				-.29		-.27		
Courageous				.26				-.24
Forgiving			-.27	-.23	-.27	-.23	-.23	
Helpful		-.25		-.33		.25		
Honest	-.33			.34			-.31	
Imaginative								
Independent	.24		.33	.36			.23	
Intellectual		.28						
Logical	.21						.25	
Loving		-.25					-.44	
Obedient	-.22			-.29				.34
Polite	-.30							
Responsible								
Self-Controlled	.27	-.23						

*All correlation coefficients significant at P equal or less than .06.

TABLE 3.5.--Significant Intercorrelations of Target Value Ranks and MMPI Scores on Admission (Pre) and Discharge (Post)*

	Target Value							
	Freedom		Self-Respect		Responsible		Self-Controlled	
MMPI Scale	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Validity Scales								
L								
F	-.25		.24	.27		.28		
K						-.24		
Clinical Scales								
Hypochondriasis								
Depression				.20	.20	.27		-.23
Hysteria							.20	
Psychopathic Deviate	-.29							
Paranoia	-.29		.26			.25		
Psychasthenia	-.29			.22	.19	.27		-.24
Schizophrenia	-.19			.24		.24		
Hypomania							-.20	
Social Introversion				.25		.30		-.21

*All correlation coefficients significant at P equal or less than .07. Coefficients computed on admission data (Pre) and discharge data (Post) separately.

Objective 8 was to further map the relationship between target values and psychopathology by comparing the mean ranks on admission and discharge of the two diagnostic groups, non-psychotic and psychotic. Table 3.6 presents the mean ranks for the two groups on admission and discharge. Out of eight comparisons made using an alpha level of .07, only the admission rankings on self-controlled yield a statistically significant difference (P less than .03) between non-psychotic and psychotic patients on a two-tailed t-test.

TABLE 3.6.--Mean Target Value Rankings on Admission and Discharge for Non-psychotic and Psychotic Patients.

		Diagnosis	
Target Value	Time	Non-Psychotic (n = 21)	Psychotic (n = 31)
Freedom	Pre	10.57	9.42
	Post	9.10	9.33
Self-Respect	Pre	7.14	6.52
	Post	4.81	6.77
Responsible	Pre	7.33	7.34
	Post	5.75	5.68
Self-Controlled	Pre	11.14*	7.55*
	Post	9.20	7.60

*Difference significant at P less than .03 on a two-tailed t-test.

Relationship of Target Values and Observed Behavior

Objective 9 was to identify all significant relationships (P = .07) betweeen each target value and staff ratings on the five scales of the MACC Behavioral Adjustment Scale. The significant correlations upon entering the hospital and at the time of discharge are presented in Table 3.7. Negative correlations indicate an association between high rankings and better adjustment (with the exception of the Motility Scale where higher ranks are associated with poorer adjustment). Positive correlations associate high rankings with poorer adjustment.

Relationship of Target Values and Length of Hospitalization

Objective 10 was to identify relationships between target value rankings on admission and discharge and duration of hospitalization. All correlations are presented in Table 3.8. The significant negative correlations indicate higher ranks associated with longer stays and, conversely, an association between low ranks and shorter stays.

Relationship of Target Values and Patient Status One Year After Hospitalization

Objective 11 was to compare admission and discharge rankings for patients in some type of aftercare and those not in care one year after hospitalization. Table 3.9 presents the mean ranks obtained for these two groups upon entering and leaving the hospital. Of eight comparisons made, four resulted in a significant difference at P less

TABLE 3.7.--Significant Intercorrelations of Target Values and MACC Behavioral Adjustment Scores at Admission (Pre) and Discharge (Post)*

	Target Value							
	Freedom		Self-Respect		Responsible		Self-Controlled	
MACC Scale	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Motility							-.36	
Affect								
Cooperation	.22		-.32					.25
Communication			-.43					
Total Adjustment			-.27					

*All correlation coefficients significant at P equal or less than .07. Coefficients computed separaately for admission (Pre) and discharge (Post) data.

TABLE 3.8.--Correlation of Length of Hospitalization and Target Value Rankings Obtained on Admission and on Discharge.

	Time of Value Rankings	
Target Value	Admission	Discharge
Freedom	-.05	.17
Self-Respect	-.22*	-.21*
Responsible	-.01	-.24*
Self-Controlled	-.17	-.15

*Significant at P equal or less than .05.

TABLE 3.9.--Mean Target Value Rankings on Admission and Discharge for Patients in Aftercare and Patients Not in Aftercare.

		Patient Status		
Target Value	Time	Aftercare (n = 24)	No Aftercare (n = 12)	P less than*
Freedom	Pre	10.21	11.50	
	Post	10.42	7.00	.03
Self-Respect	Pre	6.50	3.83	.04
	Post	5.88	3.83	.05
Responsible	Pre	7.54	5.00	
	Post	5.82	6.25	
Self-Controlled	Pre	8.41	9.36	
	Post	7.05	11.33	.01

*Two-tailed t-test.

than .05. It is concluded that differences exist between patients "in aftercare" and "not in aftercare" on discharge rankings of freedom, self-respect, and self-controlled. In addition, a difference on admission rankings of self-respect exists for the two groups.

Objective 12 was to identify differences in target value ranking on admission and discharge between patients rated "improved" and "unimproved" on one-year follow up. The mean ranks on entering and leaving the hospital for these groups are presented in Table 3.10. Only one of eight comparisons made suggested a significant difference. It is concluded that a difference exists between improved and unimproved patients in their mean rankings of self-respect upon admission to the hospital.

TABLE 3.10.--Mean Target Value Rankings on Admission and Discharge for Patients Rated "Improved" and "Unimproved" on Follow-Up.

Target Value	Time	Improved (n = 26)	Unimproved (n = 8)
Freedom	Pre	10.61	10.13
	Post	9.23	8.64
Self-Respect	Pre	4.42*	6.75*
	Post	4.85	5.25
Responsible	Pre	5.96	6.88
	Post	5.24	6.29
Self-Controlled	Pre	7.88	9.50
	Post	8.72	8.43

*Significantly different at P less than .04.

Objective 13 was to examine the relationship of target value rankings and therapists' predictions of the likelihood of patients requiring hospitalization in the future. Each therapist rated his patient on a Likert-type survey item. The frequency of ratings for the 58 patients on the item choices were as follows:

Item Choice	Number of Patients
Very unlikely	3
Fairly unlikely	12
More unlikely than likely	13
More likely than unlikely	19
Fairly likely	6
Very likely	5

The correlation between therapists' predictions (scaled 1 to 6) and target value rankings obtained on admission and discharge are presented in Table 3.11. Four out of the eight correlations are significant. The conclusions are as follows. Higher entering ranks on freedom are associated with greater likelihood of future hospitalization. Both higher entering ranks and higher discharge ranks on self-respect are associated with decreased expectation of future hospitalization. Finally, higher rankings on self-controlled at time of discharge are associated with increased expectation of future hospitalization.

TABLE 3.11.--Correlation of Likelihood of Future Hospitalization with Target Value Rankings Obtained on Admission and Discharge.

	Time of Value Rankings	
Target Value	Admission	Discharge
Freedom	-.31*	.03
Self-Respect	.37*	.36*
Responsible	.08	-.06
Self-Controlled	-.07	-.32*

*Significant at P equal or less than .01.

Conclusions About Each Target Value

The following discussion is a summary of the findings and conclusions related to each of the four target values. Each target value will be discussed separately from a perspective which arbitrarily dichotomizes the patients into those ranking a particular target value high and those ranking it low. Each discussion of a target value will summarize the findings by primarily characterizing the "high-ranking" patient. Separate characterizations will be offered for (1) patients entering with high ranks on the target value and (2) patients ranking the value high at the end of their hospitalization.

Freedom

High Admission Rankings on Freedom. Patients entering the hospital with relatively high rankings on freedom exhibit a

characteristic organization within their value system. They are likely to place higher importance on equality and being independent, logical, and self-controlled. In contrast to patients entering with lower ranks on freedom, the high-rank patients place less importance on obtaining happiness, salvation, pleasure, or social recognition, and more importance on being capable, honest, obedient, and polite. Patients entering with lower rankings on freedom are likely to present a value system organization characterized in a generally opposite manner. In this dichotomization, a picture emerges of patients with concerns over freedom, fair play, and control of oneself rather than by others. In sharp contrast is the patient with less concern over freedom who seeks happiness through more social submissiveness and conformity.

Patients entering with high rankings on freedom manifest greater psychopathology in a number of areas (MMPI scales). They express a greater number of psychiatric complaints pointing toward more serious psychological disturbance (F scale). They manifest impulsiveness, resentment toward authority, and shallowness, dissatisfaction, and a lack of conformity in their interpersonal relationships (Psychopathic deviate scale). They are prone to be overly sensitive, easily hurt, and resentful in response to perceived criticism and quick to project blame and responsibility on others (Paranoia scale). They manifest higher levels of anxiety, tension, and fear (Psychasthenia scale), and exhibit more nonconformity in thought processes and attitudes (Schizophrenia scale). Conversely, patients entering with lower ranks on freedom are apt to present a more conventional personality picture

with a capacity for closer, less alienated and less frictional relationships.

Consistent with the pathological characteristics associated with high entering ranks on freedom, patients diagnosed with more serious illnesses (psychotics) tend to have higher rankings on freedom than less disturbed patients (neurotics). High rankings of freedom are also found among patients observed by staff to be less cooperative, more resistive, and less likely to initiate and stay with tasks (MACC). When patients are followed-up one year after entering the hospital, those who entered with higher ranks on freedom are generally viewed by their therapists to be among those most likely to require hospitalization in the future.

High Discharge Rankings of Freedom. Patients exhibiting high rankings on freedom at the time of discharge reflect a markedly different organization within their value systems than was apparent for those high ranking patients entering the hospital. Clearly, the high ranking patients at discharge include some of the patients with initially high ranks who remained fairly high as well as patients with initially low ranks who increased their rankings.

Within their value systems, high "freedom" patients on discharge place importance on having an exciting life and being ambitious, broadminded, and intellectual. Less importance is placed on salvation as before as well as on true friendship, helpful and loving. Self-controlled was important along with freedom on admission, but shows an opposite relationship at discharge where it is now important for patients ranking freedom low.

At the time of discharge, there is no apparent distinction between patients ranking freedom high or low on personality characteristics, diagnosis, and behavioral adjustment. Those with higher rankings at the end of hospitalization are found to have shorter hospital stays and are less likely to be involved in care one year after hospitalization.

The major conclusions drawn about the value freedom are as follows:

1. The entering rankings have both diagnostic and prognostic implications with high ranks associated with more severe pathology, poorer adjustment in the hospital, and a greater likelihood of returning to the hospital.

2. As an outcome variable, high rankings on freedom have a generally positive meaning and are associated with an increased appreciation of values directed at personal fulfillment, although a decreased emphasis is evident on some values of a moral or social nature. High discharge rankings may reflect a rapid hospital course and less need for prolonged aftercare.

3. For a portion of the patient sample entering with low ranks on freedom, there appears to be positive psychological implications for increasing their appreciation of this value. For patients emphasizing freedom on admission, freedom is likely experienced as a deficiency and perceived as imposed on them by others. For these patients, their exercise of freedom may lack mature consideration of others resulting in negative social relationships. For this group, a

decrease in freedom's importance or a re-definition of freedom may be indicated as part of therapy.

Self-Respect

High Entering Ranks on Self-Respect. Patients ranking self-respect high upon entering the hospital also place higher importance on social recognition (respect and admiration from others) and on being independent or self-sufficient. At the same time they place less importance on broader social concerns such as having a world of peace or beauty and national security. Concern with family security and being forgiving tends to be less for those who place greater importance on self-respect.

Patients entering the hospital who place greater importance on self-respect express fewer psychiatric complaints and difficulties (F scale), less sensitivity to criticism and less need to blame others. The high value they place on respect from others does not appear to leave them particularly vulnerable to criticism or dependent on approval from others. While approval is desired, their self-approval comes first.

Incoming patients ranking self-respect high are observed by staff to exhibit better adjustment within the hospital. They exhibit greater cooperation, initiative, communicate more effectively with others and readily grasp what is told to them. However, these patients are found to have a longer stay in the hospital. Based on the characteristics of these patients, it is suggested that they are particularly compatible with the hospital milieu and motivated in treatment. These

factors may reduce any pressures to hasten discharge from the patient or the staff who likely enjoy working with the patient.

Although entering high-rank patients are likely to be hospitalized longer, the long-term implications for them are favorable. They are less likely to be in aftercare a year after entering the hospital. They are likely to exhibit continuing improvement after leaving the hospital and less likely to require hospitalization in the future.

High Discharge Rankings of Self-Respect. Patients ranking self-respect high at discharge presents a picture quite similar to the entering high-rank patient. They continue to exhibit a concern with being independent and a de-emphasis of some social values. They are less concerned about such personal, hedonistic values as pleasure and a comfortable life. They are less concerned with being clean, helpful, or obedient. The high-rank patient places greater importance on obtaining inner harmony, mature love, and wisdom, and on being courageous and honest. Such patients show a value system organization emphasizing personal-growth values rather than comfort or security. In their relationships with others, they strive toward maturity, honesty, and assertiveness, rather than more conforming efforts to be helpful or obedient which were likely to be stressed during earlier developmental years.

At the outcome of hospitalization, high-rank patients continue to express fewer psychiatric problems and manifest less depression and ansiety. They are more outgoing and responsive toward others. This picture of "high self-respect" patients showing less pathology

is also reflected in their psychiatric diagnosis as less disturbed (non-psychotic).

The high-rank patient upon discharge continues to reflect a longer hospital stay, but is not likely to be in care a year after hospitalization nor expected to require hospitalization again.

Responsible

High Admission Rankings of Responsible. Patients ranking responsible high on admission do not exhibit any values which consistently are important in conjunction with responsible. High-rank patients tend to place less importance on being broadminded and forgiving. In contrast, patients who place less importance on being responsible are more concerned about being open-minded and willing to pardon others.

Patients entering with high ranks on responsible are found to exhibit less depression, pessimism, and anxiety. They are likely to be more organized, realistic and persistent. High incoming ranks on responsible may have some long-term implications. They tend to be more characteristic of patients who continue to improve after hospitalization and less likely to remain in aftercare.

High Discharge Rankings of Responsible. Patients with high rankings on responsible at the end of hospitalization are similar to patients ranking self-respect high. They place greater importance on mature love and social recognition. However, they also place greater importance on being helpful. They show less concern for a world at peace and place less emphasis on being cheerful, clean and

forgiving. The person ranking responsible high seems to be strongly oriented to others' needs and his relationship with others.

The personality characteristics of high ranking patients at discharge reflect more ego-strength and better self-concepts with fewer expressions of psychological conflicts. Their mood is more positive and freer from worry. They are more outgoing and interested in others and less likely to develop frictional relationships or resentful attitudes.

High discharge rankings on responsible are associated with longer hospital stays as was true of high self-respect rankings. In general, the conclusions about responsible parallel those relating to self-respect. High rankings on admission and discharge have positive implications concerning the patients' personality characteristics, hospital course and outcome.

Self-Controlled

High Entering Rankings of Self-Controlled. Patients entering the hospital with high rankings on self-controlled present a value system similar in some respects to those entering with freedom high. These patients place importance on being independent and logical as well as obtaining freedom; at the same time, they place less importance on happiness and being honest, capable, or ambitious. Nor does being cheerful, loving and forgiving hold as much importance for patients ranking high as for patients with lower self-controlled rankings.

Patients entering with high ranks on self-controlled exhibit a more constricted, guarded personality picture and are less susceptible to suggestions. Personality testing indicates they have higher energy levels and are more restless, impulsive, impatient, and hyperactive than patients with lower rankings. High-rank patients are more likely to be diagnosed as more seriously disturbed (psychotics). They are viewed by staff as being overactive, loud, boisterous, restless and "on the go." These patients are likely to stay in the hospital longer.

High Self-Controlled Rankings at Discharge. Patients with high ranks on self-controlled upon discharge generally show a rather different picture from patients who ranked freedom high and even from patients who ranked self-controlled high on admission. The high-rank patient on discharge now places less importance on freedom as self-controlled becomes more important. He places importance on such values as inner harmony or freedom from inner conflict, salvation, and being obedient.

The high-rank patient on discharge reflects greater depression, pessimism, worry, and anxiety. He is more reserved, shy and sensitive in social situations. He was likely to have been diagnosed as more seriously disturbed. The high-rank patient even near discharge is viewed by staff as more uncooperative and resistive. Following discharge, this patient is likely to require aftercare and is expected to require hospitalization again.

It is concluded that self-controlled, like freedom initially, receives high rankings in those patients who, by virtue of a serious

disturbance and great difficulty inhibiting impulses, place importance on controlling themselves as a form of deficiency motivation. Other patients, typically stronger, undersubscribe to self-controlled and during the course of hospitalization begin placing more importance on this value as one which is instrumental to more adaptive and effective functioning. Conroy (1973) demonstrated that smokers were only effective in breaking their habit when they gave sufficient importance to this value.

The negative implications of high ranks at discharge are likely a function of the deficiency-motivated rankings remaining high or increasing in contrast to more moderate increases motivated by the treatment process in low-rank patients at admission. As in the case of freedom, the psychological meaning of self-controlled may have at least two variations. However, patients increasing in their appreciation of self-controlled as instrumental to self-actualization remain overshadowed by the magnitude of rankings of patients who are pathologically deficient in realizing the same value.

Summary of the Pilot Study

This pilot study was designed to examine 18 terminal values (preferable end states) and 18 instrumental values (preferable modes of conduct) selected as potentially significant in the psychological functioning of 58 adult psychiatric inpatients. Two terminal values, freedom and self-respect, and two instrumental values, responsible and self-controlled, were isolated as psychologically significant. Significant relationships were found between each target value and patients' other values, personality characteristics, psychopathology,

behavior in the hospital, length of hospitalization, clinical status one year after entering the hospital, and likelihood of returning to the hospital.

It was concluded that patients who ranked self-respect high on admission or discharge revealed less pathology, better hospital adjustment, and more favorable prognoses than patients ranking it low. The same conclusions were reached about the clinical picture of patients who ranked responsible high on admission or discharge. Patients who ranked freedom high on admission exhibited a more negative clinical picture than those who ranked it low. However, at the time of discharge high rankings on freedom were associated with less patient pathology, better hospital adjustment, and a more favorable prognosis than low rankings. Although self-controlled rankings increased for the sample over the course of hospitalization, high rankings both on admission and discharge were associated with an unfavorable clinical picture. The negative patient characteristics consistently associated with high ranks on self-controlled and with high admission ranks on freedom were interpreted as reflecting severe deficiencies in realizing these values. These deficiencies were considered to be related to the inability of more deeply disturbed patients to feel a sense of freedom and control over their lives.

The pilot study was regarded as successful in demonstrating important, consistent, and meaningful relationships between values and numerous clinical variables. The consistency of findings was supported by variables that represent diversity in constructs,

methods of measurement, data sources, and time span. The significance of each value was further underscored by its relevance for a heterogeneous group of patients in terms of sex and psychopathology. The study offered support for Rokeach's formulation of a value as a cognitive transformation of a need. It further supported the notion that a value's "importance" may be determined either by its intrinsic ideal properties or by a pathological deficiency in realizing the value.

The pilot study was also regarded successful in its major goal of meeting the prerequisites for the second phase of research concerned with experimental value education. The relationships identified in the pilot study provided the subject matter for the value education exercises administered to another sample of patients admitted later to the same psychiatric program. The methodology and results of the experimental value education phase of this study are presented in the following chapters.

CHAPTER IV

EXPERIMENTAL DESIGN AND METHODOLOGY

Subjects

One hundred and twenty adult psychiatric inpatients were used in the experimental phase of this study. They represented four sub-populations to control for sex and admitting diagnosis. The sample included 30 non-psychotic males, 30 psychotic males, 30 non-psychotic females, and 30 psychotic females. All were incoming patients admitted to the adult intensive treatment program of Pine Rest Christian Hospital. The subjects' ages ranged from 17 to 75 with a mean age of 35. The educational level of the patients ranged from completion of grade seven to graduate degrees. The sample represents a relatively well-educated group. Only 16 percent had not completed high school; 32 percent were high school graduates while another 32 percent had from .5 to 3.5 years of education beyond high school. Fourteen percent held four-year degrees and 6 percent held graduate degrees.

Thirty-two percent of the patients were residents of Kent County in Western Michigan where the hospital is located. Twenty-five percent of the patients resided in neighboring counties and another 25 percent in other parts of Michigan. Fourteen percent of the patients came from other states and 4 percent came from Canada.

The marital statuses of the patients indicated that 57.5 percent were married; 32.5 percent were single; 7.5 percent were divorced; and 2.5 percent were widowed.

Sixty percent of the subjects held jobs; 20.8 percent were exclusively homemakers; 8.3 percent were exclusively students; 9.2 percent were unemployed; and 1.7 percent were retired.

The religious affiliations of patients were predominantly Protestant. Thirty-one percent were affiliated with the Christian Reformed Church and Reformed Church of America which historically founded and supported the hospital. Another 42.5 percent of the patients were affiliated with other Protestant churches; 12.5 percent were Catholic; and 14.2 percent reported no religious affiliation at the time of admission to the hospital.

Measures

The empirical observation of the dependent variables in this study utilized eight available instruments which are described in detail below. The instruments and dependent variables are listed as follows:

Instrument	Dependent Variables
Value Survey (Rokeach, 1967)	Freedom Self-Respect Responsible Self-Controlled
Survey of Interpersonal Values (Gordon, 1960)	Conformity Independence (SIV) Leadership
Personal Values Scales (Scott, 1965)	Independence (PVS) Self-Control

Instrument	Dependent Variables
Value Profile (Bales & Couch, 1969)	Acceptance of Authority Need-Determined Expression vs. Value-Determined Restraint Individualism
Social Responsibility Scale (Berkowitz & Lutterman, 1968)	Social Responsibility
Self-Esteem Scale (Rosenberg, 1965)	Self-Esteem
Index of Adjustment and Values (Bills, 1951)	Self-Acceptance Self-Satisfaction
Internal-External Control Scale (Rotter, 1966)	Locus of Control

Value Survey

The Value Survey was used to measure the direct effects of the treatments on target value rankings immediately following treatment and repeated two to three weeks later. This instrument is described in detail in Chapter III on pp. 71-72 and presented in Appendix A.

Survey of Interpersonal Values (SIV)

The SIV is a commercially published test which has had fairly extensive use in research and counseling settings. It is a brief, self-administered, forced-choice test consisting of 30 sets of three statements. The respondent must designate one of the three as most important to him and one as least important. Each statement addresses some aspect of behavior, interacting with others, or being regarded and treated by others in some way (see Appendix B).

The SIV provides scores for six factor-analytically developed value dimensions or scales named support, conformity, recognition, independence, benevolence, and leadership. Three of these scales were used in this study as indirect measures for three of the target values. Independence is defined by Gordon (1960) as "having the right to do whatever one wants to do, being free . . ." and being associated with a non-sociable personality trait. Independence was used in this study as an indirect measure of the importance of target value freedom.

The leadership scale was selected as an indirect measure of the target value self-respect. While the author defines leadership as being in charge or having authority or power over others, he indicates that the value is associated with personality trait tendencies of an individual who is "an original thinker, energetic, self-assured and assertive." It was assumed that the value construct measured by the leadership scale would overlap substantially with target value self-respect.

The SIV conformity scale was selected as one indirect measure of the target value responsible. The conformity scale is defined as "doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist." The author indicates that the value conformity is associated with personality traits described as careful and responsible. The target value responsible (dependable, reliable) and the value conformity were assumed to be measuring the same construct to some extent.

Reliability. The author obtained test-retest reliabilities for the scales over a ten-day interval based on college students. These were found to be .86 for conformity, .89 for independence, and .88 for leadership. Reliabilities estimated by the Kuder-Richardson method were found to be .82 for conformity, .86 for independence and .83 for leadership.

Validity. A number of studies have been summarized by Gordon (1963) which provide normative data on a variety of groups with different demographic, personality, or ideological characteristics. A number of studies attest to the validity of the value scales by revealing significant associations between the scales and a variety of criteria. For example, department managers in a soap company who scored high on the conformity scale were rated as less effective in their jobs by plant managers. Engineers who value receiving support from others were rated lower in performance by their supervisors. Sales effectiveness as rated by supervisors of retail clerks was found to be (1) positively correlated with conformity for both sexes, (2) negatively correlated with recognition and leadership for males, and (3) negatively correlated with independence for females. Gordon (1963) compared data on 61 male and 60 female neurotic outpatients with a sample of normal males and females of about the same age and marital status. He found the patient group to have significantly lower conformity scores and significantly higher scores on the independence scale. No differences were found on the leadership scale.

Personal Value Scales (PVS)

The complete PVS consists of 12 scales each measuring a different personal value (Scott, 1965). An initial 60-item version was developed and later expanded to a 240-item version. Two of the 12 scales were used in this study as indirect measures of target values. The independent scale was selected as an alternative measure for the target value freedom. The self-control scale was selected as an indirect measure of the importance of target value self-controlled.

Each scale consists of a series of statements describing behaviors or personality characteristics associated with the value being measured. The respondent gives his opinion of each item by checking one of three response options--"always admire," "depends on the situation," and "always dislike." Half of the items on each scale are direct-scored and half are reversed-scored. The two scales are found in Appendix C.

The independence scale consists of 22 items (from both the short and long forms of PVS) and the self-control scale consists of 21 items. In order to reduce any transparency of these two measures in the present study, some minor modifications of the scales were made. Five of the items of the independence scale were rewritten to eliminate forms of the words freedom and independent. One item of the self-control scale ("Practicing self-control") was eliminated because of its obvious content. Finally, the items from both scales were alternated and presented as one inventory (Appendix C) to the subjects.

Reliability. Scott based his reliability measures on college undergraduates. He reports alpha coefficients of .68 on the short version of the self-control scale and .85 on the long version. The two-week test-retest stability on the short version was .72 and the correlation between short and long forms was .78. The independence scale yielded alpha coefficients of .55 (short form) and .82 (long form). The two-week test-retest reliability coefficient for the short form was .73. The correlation between both forms of the independence scale was .74.

Validity. Scott correlated scores obtained under three sets in instructions for rating items: (1) according to "rightness" or "wrongness" of the trait (item), (2) according to whether others should admire or disapprove of the trait, and (3) whether the trait is admired or not in oneself. Significant intercorrelations were obtained. They were interpreted as evidence of concurrent validity. Another study reported correlations between value scale scores and separate ratings of distress over transgressions presumed to be related to the various values. Scott found significantly higher scores on independence for students in a drama club who were judged to be nonconformists than students in other comparison groups.

Value Profile (VP)

The Value Profile (Bales & Couch, 1969) consists of 143 value statements which are presented in a Likert format with six response categories. The response categories are (1) Strongly Disagree, (2) Disagree, (3) Slightly Disagree, (4) Slightly Agree, (5) Agree,

and (6) Strongly Agree. The VP was developed on a predominantly undergraduate sample of 552 subjects by factor analysis of the items. The factor analysis yielded four orthogonal factors: I, Acceptance of Authority; II, Need-Determined Expression vs. Value-Determined Restraint; III, Equalitarianism; and IV, Individualism.

Items from three of the VP factors were selected to provide indirect measure of three target values likely to be implicated. These target values include freedom (which should be inversely related to factor I, Acceptance of Authority); self-respect (related to factor IV); and self-controlled (factor II, Value-Determined Restraint).

For the present study, the three scales were constructed using the 10 items with the highest factor loadings on their respective factors. The 10 items included in the "Acceptance of Authority Scale" had a range of factor loadings from .56 to .76 with a mean of .69. The range of factor loadings for items on the "Individualism Scale" was .28 to .49 with a mean of .39. The items on the "Need-Expression vs. Value-Determined Restraint Scale" had a range of factor loadings from -.20 to .62 and a mean of .39 (absolute value). Items with negative factor loadings were reversed-scored on this scale. Since each of the three scales contained 10 items with six response categories, each scale provided a range of raw scores from 10 to 60. The 30 items were interspersed among each other and the eight items of the Social Responsibility Scale described in the next section. This resulted in a 38-item inventory which was simply entitled Part V (see Appendix D).

Social Responsibility Scale (SRS)

The SRS is a brief scale designed to assess traditional social responsibility or a person's orientation toward helping others apart from any specific gain for himself (Berkowitz & Lutterman, 1968). The scale presumably measures a personality characteristic rather than a value per se. However, it is clear that at least half of the scale's items call for an opinion as to the relative desirability or importance of certain attitudes or behaviors stemming from the concept of social responsibility. As such, the items of this scale are likely to provide some indirect measure of the value an individual places on social responsibility as well as measuring the strength of that personality characteristic. On that basis, the SRS was selected as an indirect measure of the target value responsible.

The SRS consists of eight Likert scale items. Half of the items are reverse scored. The respondent is required to respond on a 5-point scale with categories designated as strongly agree, agree, undecided, disagree, and strongly disagree. In order to use this scale in the most unobtrusive fashion, two modifications of the scale were used in this study. First, the 5-point response scale was changed to a 6-point scale identical to that of the Value Profile above. Second, the SRS items were interspersed with the items of the VP and administered within the same format (see Appendix D).

Reliability. The authors administered the SRS to a probability sample of 766 adults throughout the state of Wisconsin. The internal consistency of the scale was regarded as "very satisfactory," although no reliability data were reported.

Validity. In support of the conservative and traditional orientation of the scale, the authors found higher scores with greater frequency among working class than among middle class respondents. High scores were more likely to affiliate with the Republican party. Within both classes high scoring individuals on the SRS were more likely to make financial contributions to educational or religious organizations, to be more active in organizations, and to show greater political interest, knowledge, and participation.

Self-Esteem Scale (Rosenberg, 1965)

This scale is one of the best and most efficient measures of "global self-esteem." It consists of 10 Likert-type items on which the subject is allowed one of four responses: strongly agree, agree, disagree, or strongly disagree. The items are fairly homogeneous in using "self-as-a-whole" as the referent object. The items are scored on only the agree-disagree dichotomy. The scoring system combines some items to yield a 7-point Guttmann scale indexing a unidimensional attitude of favorability to unfavorability toward self. The SES items are found in Appendix E.

The scale has a reported coefficient of reproducibility of .92 and a two-week test-retest reliability of .85. The scale has revealed high concurrent validity with other measures of self-esteem with correlations ranging from .53 to .83. Correlations with measures of other self-constructs are consistently lower suggesting some construct validity for this scale. Evidence for the scale's construct validity is found in various studies showing theoretically predicted associations

with depression, anxiety, interpersonal security, and participation in activities (Wylie, 1974).

Index of Adjustment and Values (Bills, 1951)

The IAV is one of the better constructed and widely-used self-report instruments available. It provides two major scores: (1) a "Self-Acceptance" score and (2) a "Self-Minus-Ideal Discrepancy" score from which a "Self-Satisfaction" score is inferred.

The IAV consists of 49 trait adjectives exhibiting adequate test-retest stability. Subjects respond to each adjective in terms of three questions. (1) How often are you this sort of person? (response is on a 5-point scale from "most of the time" to "seldom). (2) How do you feel about being this way? (a 5-point scale from "very much like . . ." to "very much dislike . . ."). (3) How much of the time would you like this trait to be characteristic of you? (a 5-point scale from "seldom" to "most of the time"). The sum of responses on (2) provide a measure of "self-acceptance." The sum of item discrepancies in response to (1) and (3) provide a measure of congruence between self and ideal-self or "self-satisfaction." (It should be noted that some investigators use the sum of scores for the responses to question (1) to provide an additional "self" score). The IAV is found in Appendix F.

Reliabilities. Wylie (1974) reports split-half reliabilities on self scores ranging from .53 (college students) to .92 (factory workers) with test-retest coefficients from .90 (6 weeks) to .81

(6 months) for college students. Self-acceptance score split-half coefficients are .91 to .93 for nurses with test-retest reliabilities ranging from .83 (6 weeks) to .70 (6 months) for college students. Self-minus-ideal discrepancy scores yield split-half coefficients ranging from .87 to .93 with test-retest reliabilities from .87 (6 weeks) to .61 (6 months) using college students.

Validity. All three self-regard scores reveal significant moderate correlations with a variety of measures of similar constructs. These correlations range from .24 to .71 depending on the particular self-regard instruments and sample sizes involved (Wylie, 1974). Many studies demonstrate theoretically predicted associations with different constructs including achievement, affective state, body satisfaction, and acceptance of others (Wylie, 1974). There is some evidence for discriminant validity for self-acceptance and self-satisfaction scores, which correlate from -.67 to as low as -.25. The self score and the self-satisfaction score correlate .70 to .83, but are somewhat inflated by the common self score. The discriminant validity between the self score and self-acceptance score is the most questionable because their correlations range from .71 to .90.

Scale to Measure Internal Versus External Control (Rotter, 1966)

This scale consists of 29 forced-choice items, 6 "fillers" and 23 pairs consisting of an internal and an external belief statement. A single score is computed by totaling the number of external beliefs endorsed (ranging from 0 to 23). Higher scores indicate increasingly

more generalized expectation that reinforcement or events in one's life are controlled by forces external to oneself (see Appendix G).

The scale yielded an internal consistency coefficient of .70 and test-retest reliabilities ranging from .60 and .83 (one month) to .49 and .61 (two months) for undergraduate males and females, respectively.

Validity studies show little correlation with social desirability measures. Factor analytic studies support the unidimensionality of the I-E Scale. Numerous studies provide theoretically expected empirical associations with other constructs demonstrating the construct validity of the scale (Rotter, 1966; Lefcourt, 1966; Hersch & Schreibe, 1967).

Description of Treatments

Five value education exercises were designed for the present study. Four of these exercises represent experimental treatments each designed around a different target value. The fifth exercise represents a control condition which addresses the importance of values generally, but does not address any specific target value. The four experimental exercises differed in content, but paralleled each other in the nature and sequence of activities constituting the treatment. The design of the control exercise also paralleled the others, although activities specifically involving target value examination were omitted.

Value education exercises were randomly assigned to incoming patients. During the first week of hospitalization, each subject was

scheduled for "research testing." The subject was then individually administered the designated value education exercise which consisted of a pretreatment activity requiring the rank ordering of one set of 18 values (Part I) and, then, the actual treatment exercise (Part II). The sequence of pretreatment and treatment steps are described in detail below.

Part I: Pretreatment Value Survey

Step 1. Each subject was given a three-page handout entitled "Value Survey--Part I." The first page contained some introductory comments about the research. These comments informed the subject that the research concerned value systems, thanked the subject for participating, informed him that he would be scheduled for two more sessions in about two or three weeks, instructed him that his own ideas and personal opinions were the "best" answers and to ask for help whenever he was unsure about what he was supposed to do (see Appendix H).

Step 2. The second page of the handout contained the standard instructions for rank ordering 18 values on form D of the Rokeach Value Survey.

Step 3. On the third page of the handout, the subject rank ordered either the 18 terminal values or the 18 instrumental values depending on which set of values contained the target value to be examined. Half of the control subjects ranked the terminal values and half the instrumental values. The subject returned Part I to

the experimenter upon completion and was immediately administered Part II.

Part II: Treatments

Part II consisted of a four-page handout entitled "Comparing Your Values With Other People" for experimental subjects and a two-page handout entitled "Some Conclusions About Values" for control subjects. The first two pages (Steps 4 through 7) involved target value examination and were omitted from the control exercise (see Appendices I through M).

Step 4. The subject was presented with a table of scores on which his ranked "scores" for seven values from Part I had been transferred. The table was designed so the subject could compare his "scores" with those of former patients. For each experimental treatment, the values in the comparison table were different. However, the table format and criteria for selecting the relevant values were the same for each table designed. For each table, the seven relevant values included the target value, two values with the greatest positive correlations with the target value found in the pilot study, and four values with the greatest negative correlations found in the pilot study. The table was designed so that the subject could determine whether his target value was ranked high, average, or low in comparison with former patients. In addition, he could evaluate to what extent the six associated values within his value system approximated the "typical patterns" of former patients. In Step 4, the subject was simply required to study the comparison table.

Step 5. After studying the table, the experimental subjects were required to respond to the question "Which group do you think you are most like?" The subject circled his response on a scale ranging from 1--"Almost exactly like the HIGH (target value) group" to 11--"Almost exactly like the LOW (target value) group."

This activity was included in the treatment for several reasons: (1) to strengthen the probability that the subject will study the comparison table by requiring an active response to it, (2) to force the subject to formulate a conclusion about himself in relationship to the target value, and (3) to have a measure of how consistently that self-perception reflects the table data.

Step 6. On the second page of Part II, the experimental subjects were presented a second table. This table provided further information about the target value. The table was designed in a dichotomous fashion to show differences found in the pilot study between "patients placing greater importance" and "patients placing less importance" on the target value.

The second table offered a variety of statements based on personality tests, observations of hospital staff, length of stay, therapist's expectations, and, in some cases, observed changes in target value rankings for patients on leaving the hospital. The statements in the table could depict positive, negative, or neutral patient characteristics for either high or low rankings of the target value. However, based on pilot study results, positive characteristics were generally associated with high rankings on self-respect

and responsible and with low rankings on freedom and self-controlled.

The purpose of the second table was to provide information with the potential to arouse self-dissatisfaction with one's ranking of the target value. It is necessary that the patient identify with former patients generally and more specifically with either those patients ranking the value high or those ranking it low. Given this identification, he becomes aware of characteristics within himself that may be implicated by his performance in ranking the target value. At that point, an affective state of self-dissatisfaction (or satisfaction) may be aroused.

Step 7. Following presentation of the second table, the subject was instructed "Once again, indicate which group you think you are most like." The subject again rated himself on the 11-point scale as in Step 5. This activity was again included to maintain active participation on the subject's part and to provide a measure of the impact of the information in the second table on the subject's identification with either the high or low group.

Step 8. The third page of Part II for experimental subjects began with a section entitled "Conclusions About Former Patients." The first page of Part II for control subjects began with a similar section entitled "Some Conclusions About Values."

For experimental subjects, several general statements were made about the target value. In each case, the first statement suggested that the meaning and importance placed on the target value affects

what people feel and do. That statement was followed by some suggestions as to why people may rank the value high or low in the light of the second table. A final suggestion was made that it would be worthwhile for people to think about what the target value means to them and how it may affect them.

For control subjects, four statements are offered which address values generally. The first statement pointed out that values affect how a person views and feels about things. The second, that values provide a basis for making decisions and determine what a person does in many situations. The third statement suggested that when people change, their values also change in some important ways. The fourth statement suggested that it is worthwhile for people to know what values are important to them and how they affect their lives (see Appendix M).

After the subject had read the conclusions presented in Step 8, the salient portions of the experimental treatments were considered completed. The remaining steps (9 to 13) essentially consisted of questions designed to measure the immediate impact and validity of the treatments for all subjects.

Step 9. Following presentation of the conclusion statements, both experimental and control subjects were asked to respond to the question "What do you think?" They circled their responses on a scale from 1--"I agree completely . . ." to 11--"I disagree completely . . . ."

This item was included to further assess the validity of the treatments through the subject's acceptance of the experimenter's interpretations and, by inference, the data on which the conclusions were drawn.

Step 10. All subjects were asked the question, "How do you feel, right now, about the way you have arranged your values?" The subjects again circled responses on an 11-point scale. This item was included to give some indication of any dissatisfaction aroused in treatment groups in contrast to the control group.

Step 11. On the last page of Part II, subjects were told, "We would now like to find out what you think about this way of learning about your values." They were first asked to respond on an 11-point scale to the question, "Did you find it interesting or thought-provoking."

Step 12. Subjects were then asked to respond similarly to the question, "Do you feel you learned something about your values?"

Step 13. Finally, the subjects were required to given an indication of their overall perception of congruence between their behavior and value system by responding to the question, "Do most of the things you do match the way you arranged your values?" (Steps 11-13 are found in Appendix O.) After responding to these questions, all subjects were instructed to turn in Part II.

Observations of Dependent Variables

The measures of the dependent variables in this study were obtained over a period of four weeks in three separate sessions. The time frame and specified measures obtained in each session were identical for every subject. The plan of data collection used is described below.

Time I

Immediately following the value education treatment (Part II above), each subject was administered the complete Value Survey. It was labeled Part III (see Appendix N). The subject was first asked to rank order the set of 18 values that he had not yet been exposed to. Next, he was asked to once again rank order the set of 18 values that he had rank ordered in Part I (the initial phase of the value education exercise).

Time II

Two to three weeks after value education, each subject was scheduled for a second battery of inventories. This battery consisted of a second administration of the complete Value Survey and the four instruments providing the various indirect measures of the target values (Appendices A, B, C, and D).

Time III

Three to four weeks after value education, each subject was scheduled for a third battery of inventories consisting of the three instruments measuring the four self-regard variables (Appendices E, F, and G).

Hypotheses

The four major research hypotheses under investigation in this study are stated as follows:

Hypothesis 1:

> Patients who received targeted value education will obtain a higher mean rank on their respective target value measured at Times I and II than patients receiving other value education exercises.

Hypothesis 2:

> Patients who receive targeted value education will exhibit less variance in their respective target value ranks at Times I and II than patients receiving other value education exercises.

Hypothesis 3:

> Patients who receive value education aimed at a particular target value will obtain higher mean scores on the set of indirect measures of their respective target value at Time II than patients receiving other value education exercises.

Hypothesis 4:

> Patients who receive targeted value education will obtain higher mean scores on the set of four self-regard measures at Time III than patients receiving the non-targeted control exercise.

Data Matrix

Thirty incoming patients within each of the four subgroups defined by sex and diagnosis were randomly assigned to the five treatment conditions. The design is basically a 5 by 2 by 2 factorial design in which the three factors (treatment, sex, and diagnosis) are fixed, crossed, and balanced. There are 20 cells with 6 replications per cell. Since the first two hypotheses involve the repeated

observations of target value rankings at Times I and II, the basic design is extended into a repeated measures design with the time as a fourth factor.

Methods of Analysis

The general strategy of analysis for each hypothesis involved two stages. The first stage always consisted of an omnibus test of the null hypotheses of no treatment main effects and no interaction of treatment with other factors. The second stage, following rejection of a given null hypothesis, consisted of post hoc analysis of the data using the Tukey and Sheffe methods (T and S methods) for pairwise and complex contrasts, respectively. These procedures were used to test the specific directional hypotheses for treatment main effects or simple main effects within each level of any factor interacting with treatment. The specific omnibus procedures used in the first stage of analysis for each hypothesis are described below.

Analysis: Hypothesis 1

A three-way (treatment, sex, and diagnosis) repeated measures ANOVA was used to evaluate the treatment effects on the rankings of each of the four target values observed immediately following treatment (Time I) and two to three weeks after treatment (Time II). Each of the four univariate tests focused on the treatment main effect and examination of all interaction effects of treatments with the factors sex, diagnosis, and time.

Analysis: Hypothesis 2

Levene's test of homogeneity of variances was used to analyze the effect of the experimental treatments in reducing the spread of target value rankings within their respective groups at Time I and Time II. The analysis consisted of four separate three-way repeated measures ANOVAs on the absolute value of the difference between the observed target value ranking and its cell mean rank. The four univariate tests focused on treatment main effects and all interaction effects of treatments with sex, diagnosis, and time.

Analysis: Hypothesis 3

A three-way multivariate analysis of variance test was used to evaluate treatment effects and interactions on each set of dependent variables indirectly measuring their respective target value's importance. The four separate MANOVAs involved nine dependent variables observed only at Time II; three dependent variables associated with freedom and two dependent variables for each of the other target values.

Analysis: Hypothesis 4

A single three-way MANOVA was used to analyze the effects of treatments and interactions of treatments with sex or diagnosis on the set of four dependent variables measuring self-regard observed three to four weeks after treatment (Time III).

Significance Levels

Different alpha levels were used for the two stages of the analysis. For each omnibus test, the level of significance was set at .10 in order to reduce the probability of making a type II error. The rationale for this approach is based on two considerations. First, the F test includes numerous non-directional tests of differences among the five treatment groups which are not of interest in this study. Thus, the omnibus test is more conservative than a planned comparison focusing on the single contrast of interest. On the other hand, theory in the area of value change is not sufficiently strong to support the use of planned contrasts. A second consideration involves the limited number of subjects across treatments (cell n = 6) within each level designated by sex and diagnosis. Glass and Stanley (1970) recommend setting alpha at .10 or .15 when a small number of subjects are involved in order to reduce the probability of a type II error.

At the second stage of analysis, specifically examining the directional research hypotheses, greater protection against a type I error was employed. A non-directional test at the .10 level of significance uses a critical value comparable to a directional test at the .05 level of significance. Since the post hoc hypotheses of interest were directional, the level of significance should be interpreted as .05. Even though the T and S methods are employed in a one-tailed manner, they still provide conservative tests. They are designed to provide a given level of protection for the collection of all possible constrasts among treatment groups. However, in the

present study, a maximum of four pairwise contrasts held potential interest. Using the S-method, only 11 complex directional tests between a designated target group and all combinations of 2, 3 and 4 of the comparison groups were of interest.

Summary

The sample for this study consisted of 60 male and 60 female psychiatric inpatients. Thirty non-psychotic patients and 30 psychotic patients (per admitting diagnosis) were represented within each sex group. Patients within each of the four subgroups were randomly assigned to one of five value education exercises. Four experimental exercises and one control exercise were used. The four experimental treatments were similar in format and each directed at examining the importance of a different target value. The control exercise was not targeted.

Incoming experimental patients were first asked to rank order a set of 18 values which contained their target value. They were then given three types of information: (1) an indication of whether their rank placement of the target value was high or low in comparison to other patients, (2) statements about some characteristics of patients who ranked the target value high and those who ranked it low, and (3) the experimenter's conclusions about the significance of the target value when ranked high or low. Control subjects received only information suggesting that values generally were important to understanding feelings and behavior.

Immediately after completing the exercise, each subject was administered the complete Value Survey (both sets of 18 values). Two weeks later, the subject was administered the Value Survey for a second time and a number of indirect measures of each of the target values using other instruments measuring the same or a closely related construct. Three weeks later, the subject was administered three instruments measuring four dimensions of self-regard.

Four separate three-way repeated measures ANOVAS were used to test for treatment main effects and simple main effects on each of the four target values' mean ranks. Levene's test was used in four three-way repeated measures ANOVAs to test for treatment main effects and simple main effects in reducing the variance of target value rankings. Four three-way MANOVAs were used to assess treatment effects on each set of indirect measures corresponding to a target value. A single three-way MANOVA was used to assess treatment effects on the set of four self-regard variables. All significant omnibus tests were followed with contrasts using the Tukey and Sheffe methods to test for the directional differences as hypothesized.

CHAPTER V

ANALYSIS OF RESULTS

Chapter V is organized into six sections. The results associated with the four major hypotheses of this study are presented in the first four sections. In each section, the hypothesis is generally examined by analysis of observations related to each target value taken in the following sequence: freedom, self-respect, responsible, self-controlled.

The effects of value education on target value rankings across time are examined in the first section. Results of the analysis of the effects of value education on the variance of target value ranking are presented in the second section. The analysis of effects of value education on indirect measures of target values is presented in the third section. The fourth section is a presentation of results of the analysis of value education effects on self-regard. The fifth section is a discussion of the results associated with each hypothesis. The final section is a summary of the results associated with each value education exercise.

Analysis of the Effects of Value Education on Target Value Ranking

The major experimental hypothesis under consideration in this section is stated as follows:

Hypothesis 1:

> Patients who receive value education directed at examining the importance of a target value (freedom, self-respect, responsible, or self-controlled) will obtain a higher mean rank across time on the target value than patients receiving other value education exercises.

A three-way repeated measures analysis of variance was used to evaluate the treatment effects on the rankings of each of the four target values. Each of the four statistical tests focused on the treatment main effect and examination of all interaction effects of treatments with the factors sex, diagnosis, and time. Following the methods and rationale of analysis presented in Chapter IV, all ANOVA findings significant at the .10 level will be presented for each target value. (F ratios for all sources of variance can be found in Table P-1, Appendix P.) Each significant omnibus test will be followed by presentation of the appropriate means and directional comparison tests of the means using the T and S methods at a significance level of .05 (one-tailed).

In addition to the fomal analysis outlined above, some non-significant trends, either consistent with or contrary to the hypotheses, will be noted in the presentation of results.

Effects of Value Education on Rankings of Freedom

In the three-way repeated measures ANOVA on the ranking of freedom, no significant treatment main effects were found. Out of all interaction effects involving treatments, only the treatment by diagnosis interaction was significant ($F = 3.495$, $P = .010$,

df = 4,100). The mean rankings of freedom for each treatment group within the two levels of diagnosis are given in Table 5.1. It was predicted that patients receiving Treatment 1 (freedom) would obtain higher mean rankings on freedom within each level of diagnosis than patients in the comparison groups.

TABLE 5.1.--Mean Rankings of Freedom by Diagnosis and Treatment Groups.

Treatment Group	Diagnostic Category	
	Non-Psychotic	Psychotic
1. Freedom	7.92*	9.58*
2. Self-Respect	6.71	11.00
3. Responsible	11.00	9.21
4. Self-Controlled	9.46	7.25
5. Control	9.42	9.33

*Not significantly higher than comparison groups.

Comparison of the means for simple main effects among non-psychotic patients reveals that Group 1 exceeds Groups 3, 4, and 5. The mean difference between Group 1 and Groups 3, 4, and 5 is 2.04. The critical difference for this complex contrast using the Scheffe method is 3.29 (P = .05, df = 4,100). Pairwise comparison of Group 1 with each of the three groups using the Tukey method reveals that none of the differences exceed the critical difference of 3.56

(P = .05, df = 100). Comparison of the means for simple main effects among psychotic patients reveals that Group 1 exceeds only Group 2 by a mean rank difference of 1.42 which is not significant using the Tukey method.

Effects of Value Education on Rankings of Self-Respect

No treatment main effects or interaction effects involving treatments were found in the repeated measure ANOVA of self-respect rankings. The mean rankings on self-respect across time for each treatment group are found in Table 5.2.

TABLE 5.2.--Mean Rankings on Self-Respect at Times I and II for Each Treatment Group.

Treatment Group	Mean Rank		
	Time I	Time II	Change
1. Freedom	6.88	5.42	+ 1.46
2. Self-Respect	5.83	6.42	- .59
3. Responsible	8.17	6.54	+ 1.63
4. Self-Controlled	7.21	5.21	+ 2.00
5. Control	6.37	5.33	+ 1.04

It is of interest to note that patients in Group 2 (Self-Respect) obtained the highest mean rank at Time I as predicted. However, Group 2 was also the only group to exhibit a decrease in rankings from

Time I to Time II in contrast to consistent increases across the comparison groups. The target group did not maintain high ranks as predicted and deviates from the general maturational pattern of increased ranks observed in the comparison groups.

Effects of Value Education on Ranking of Responsible

The repeated measures ANOVA on the rankings of responsible resulted in two significant findings: a treatment main effect ($F = 2.538$; $P = .044$; $df = 4,100$) and a treatment by diagnosis by time interaction ($F = 2.148$; $P = .080$; $df = 4,100$). The mean rankings for each treatment group are given in Table 5.3.

TABLE 5.3.--Mean Rankings of Responsible for Each Treatment Group.

Treatment Group	Mean Rank
1. Freedom	7.15
2. Self-Respect	8.20*
3. Responsible	6.43*
4. Self-Controlled	8.89*
5. Control	6.33

*Group 3 significantly higher than groups 2 and 4 (T-method, $C = 1.76$, $P = .05$, $df = 100$).

Patients receiving Treatment 3 (responsible) obtained higher mean rankings than Groups 1, 2, and 4, but did not exceed the control group. The mean difference between Group 3 and Groups 1, 2, and 4 is 1.65 and does not exceed the critical difference of 2.29 determined by the Scheffe method (P = .05, df = 4,100). Pairwise comparison between Group 3 and each of the other treatment groups reveals that Groups 2 and 4 exceed the critical difference of 1.76 using the T-method.

The mean rankings of responsible across time for non-psychotic and psychotic patients in each treatment group are presented in Table 5.4. Comparison of mean ranks and mean difference (change) scores for simple main effects among non-psychotic groups revealed neither significantly higher rankings at Times I and II, nor a significant increase (change) over time. Comparison of mean ranks and change scores among psychotic patients for simple main effects revealed that psychotic patients in Group 3 obtained significantly higher rankings at Time II than psychotic patients in the comparison group. Mean rankings at Time I and mean change scores for Group 3 were not significantly greater than any one of the comparison groups.

Effects of Value Education on Rankings of Self-Controlled

The repeated measures ANOVA did not reveal any significant treatment main effect or interaction effects involving treatment. The mean ranks on self-controlled for treatment groups and each sex by treatment group are presented in Table 5.5.

TABLE 5.4.--Mean Rankings on Responsible at Times I and II by Treatment and Diagnostic Groups.

Treatment Group	Non-Psychotic			Psychotic		
	Time I	Time II	Change	Time I	Time II	Change
1. Freedom	4.83	7.09	-2.26	8.42	8.25	.17
2. Self-Respect	7.17	7.42	- .25	8.42	9.84	-1.42
3. Responsible	6.92	6.08	.84	7.34	5.42*	1.92
4. Self-Control	8.58	5.58	3.00	9.34	12.09	-2.75
5. Control	6.42	4.92	1.50	6.84	7.17	- .33

*Significantly higher than all comparison groups (S - method, C = 3.78, P = .05, df = 4,100).

TABLE 5.5.--Mean Ranks on Self-Controlled for Males and Females in Each Treatment Group.

Treatment Group	Mean Rank		
	Male	Female	Combined
1. Freedom	8.79	9.17	8.98
2. Self-Respect	9.25	9.29	9.27
3. Responsible	7.28	11.13	9.21
4. Self-Control	10.66	7.38	9.02
5. Control	8.20	9.37	8.54

Mean ranks are presented separately for sex groups in Table 5.5 even though the treatment by sex interaction was not significant ($F = 1.933$; $P = .110$, $df = 4,100$). Within levels of sex, Group 4 males exhibit the lowest mean while only Group 4 females exhibit the highest mean as predicted.

Analysis of the Effects of Value Education on the Variance of Target Value Rankings

The value education exercises were constructed to provide negative information associated with high rankings, as well as low rankings, on some of the target values. In addition, the thrust of the treatments was not designed or expected to suggest that any particular target value belonged in the number 1 rank order position. As a consequence, it was predicted that the treatments would reduce the variance of their respective target value rankings.

The major experimental hypothesis under consideration is stated as follows:

Hypothesis 2:

> Patients who receive value education aimed at examining a particular target value will exhibit less variance in their rankings of that target value across time than patients receiving other value education exercises when observed immediately and two to three weeks after intervention.

A three-way repeated measures ANOVAs using Levene's test of homogeneity of variances was employed for each target value and followed by post hoc analysis of significant omnibus test findings. (F ratios for all sources of variance can be found in Table P-2, Appendix P.) The results for each target value are presented below.

Effects of Value Education on the Variance of Freedom Rankings

The three-way repeated-measures ANOVA on the absolute deviation (rank minus cell mean) scores of freedom resulted in only one significant finding: a time by treatment by diagnosis interaction ($F = 2.194$; $P = .075$; $df = 4,100$). The mean deviation scores across time by treatment and diagnostic groups are presented in table 5.6. Comparison of the means reveals that non-psychotic and psychotic patients receiving Treatment 1 (freedom) do not exhibit significantly lower variances at either time or decreased variance in rankings across time as hypothesized.

TABLE 5.6.--Mean Deviation Scores on Freedom Across Time by Treatment and Diagnosis.

Treatment Group	Non-Psychotic			Psychotic		
	Time I	Time II	Change	Time I	Time II	Change
1. Freedom	2.7	3.4	- .7	3.3	3.9	- .6
2. Self-Respect	4.7	3.3	1.4	2.8	2.9	- .1
3. Responsible	3.2	4.1	- .9	3.4	3.6	- .2
4. Self-Control	3.3	3.0	.3	3.0	3.1	- .1
5. Control	1.8	3.0	-1.2	3.8	2.1	1.7

Effects of Value Education on the Variance of Self-Respect Rankings

The ANOVA of self-respect deviation scores resulted in a significant treatment main effect ($F = 3.034$; $P = .021$; $df = 4,100$). Two significant interaction effects were also found: (1) treatment by diagnosis ($F = 2.331$; $P = .061$; $df = 4,100$) and (2) time by treatment by sex ($F = 3,050$; $P = .020$; $df = 4,100$).

The mean deviation scores for treatment by diagnostic group and combined groups are given in Table 5.7. Comparison of the combined group means (main effect) reveals that patients receiving Treatment 2 exhibited a mean deviation score that was only lower than Group 3 (a non-significant difference). Investigation of simple main effects among non-psychotic patients reveals that Group 2 obtained a lower mean deviation score than Groups 3 and 4 (non-significant differences).

TABLE 5.7.--Mean Deviation Scores on Self-Respect by Treatment and Diagnosis.

Treatment Group	Non-Psychotic	Psychotic	Combined
1. Freedom	2.4	2.2	2.3
2. Self-Respect	2.6*	4.0*	3.3*
3. Responsible	2.9	4.2	3.5
4. Self-Control	2.8	3.2	3.0
5. Control	1.6	3.6	2.6

*Group 2 not significantly lower than any comparison group.

Among psychotic patients, Group 2 obtained a lower mean deviation score than Group 3 which is also not significant.

The mean deviation scores representing the time by treatment by sex interaction are presented in Table 5.8. Investigation of simple main effects among males reveals that Group 2 exhibited the greatest decrease in variance over time (as predicted). However, this change is not significantly different from any of the comparison groups. Among females, Group 2 was the only one to exhibit increased variance across time, and directly opposite to hypothesized results. Group 2 females did obtain the lowest variance at Time I as predicted and significantly lower than Group 3 females.

TABLE 5.8.--Mean Deviation Scores on Self-Respect Across Time for Males and Females in Each Treatment Group.

Treatment Group	Male			Female		
	Time I	Time II	Change	Time I	Time II	Change
1. Freedom	2.0	3.6	-1.6	2.4	1.1	1.3
2. Self-Respect	4.0	3.3	.7*	2.3**	3.6	-1.3
3. Responsible	3.8	3.3	.5	4.5**	2.5	2.0
4. Self-Control	2.8	3.0	- .2	3.9	2.1	1.8
5. Control	2.8	3.0	- .2	2.6	1.8	.8

*Not significantly different from comparison groups.

**Significantly different (T-method, C = 2.1, P = .05, df = 100)

Effects of Value Education on the Variance of Responsible Rankings

The ANOVA of deviation scores for responsible resulted in a significant time by treatment by sex interaction ($F = 2.032$; $P = .096$; $df = 4,100$). The mean deviation scores across time for males and females in each treatment group are presented in Table 5.9. Comparison of the means for simple main effects among males reveals that Group 3 exhibits both a significantly lower variance at Time II and a significant decrease in variance over time when contrasted with Group 1.

TABLE 5.9.--Mean Deviation Scores on Responsible Across Time for Males and Females in Each Treatment Group.

Treatment Group	Male			Female		
	Time I	Time II	Change	Time I	Time II	Change
1. Freedom	2.6	4.9*	-2.3**	3.0	2.7	.3
2. Self-Respect	3.7	3.3	.4	3.8	3.5	.3
3. Responsible	3.3	2.0*	1.3**	3.3	3.5	- .2
4. Self-Control	4.5	2.9	1.6	3.5	3.1	.4
5. Control	1.7	1.9	- .2	3.8	2.5	1.3

*Significant difference (T-method, C = 2.3, P = .05, df = 100)

**Significant difference (T-method, C = 3.1, P = .05, df = 100)

Effects of Value Education on the Variance of Self-Controlled Rankings

The ANOVA of deviation scores on rankings of self-controlled resulted in a significant treatment main effect ($F = 2.574$; $P = .042$; $df = 4,100$). The mean deviation scores for each treatment group are given in Table 5.10. Inspection of the means reveals that Group 4 obtained the highest variance among treatment groups, and directly opposite hypothesized results.

Analysis of the Effects of Value Education Indirect Measures of the Target Values

Two to three weeks after the value education interventions, all subjects were administered four sets of indirect or alternative measures of the importance of each of the target values. This

TABLE 5.10.--Mean Deviation Scores on Self-Controlled for Each Treatment Group.

Treatment Group	Mean Deviation Score
1. Freedom	4.4
2. Self-Respect	4.5
3. Responsible	3.8
4. Self-Controlled	4.6
5. Control	3.2

involved a total of nine dependent variables; three associated with freedom and two associated with each of the other three target values. This involved a total of nine dependent variables; three associated with freedom and two associated with each of the other three target values.

The major hypothesis under consideration is stated as follows:

Hypothesis 3:

> Patients who receive value education directed at examining a particular target value will place greater importance on closely related constructs indirectly measuring that value than subjects receiving other value education exercises when observed two to three weeks after intervention.

A three-way multivariate analysis of variance test was used to evaluate treatment effects and interactions on each of the four sets of indirect measures corresponding to the target values. (F ratios for all sources of variance in the multivariate and univariate

ANOVAs can be found in Tables P-3 through P-10, Appendix P.) The findings for each set of dependent variables are presented in this section.

Indirect Measures of Freedom

The three-way MANOVA on the set of three dependent variables indirectly measuring the importance of freedom resulted in a significant treatment by sex interaction (Multivariate F = 1.569, P = .100, df = 12,259.575). The univariate F test results for each of the three dependent variables are as follows: Independence (PVS) (F = 1.761, P = .142, df = 4,100); Acceptance of Authority (F = 2,381, P = .056, df = 4,100); Independence (SIV) (F = 1.114, P = .354, df = 4,100). The mean scores for each dependent variable by sex and treatment group are presented in Table 5.11. Inspection of the mean scores reveals that among all females, those receiving Treatment 1 obtained mean scores as predicted on each dependent variable. Post hoc analysis of simple main effects resulted in significant differences only for females on acceptance of authority. Group 1 females were significantly lower (more independent of authority) than the four comparison groups using the S-method (critical difference = 7.38, P = .05, df = 4,100). Pairwise comparison yielded significant differences only between Group 1 and Groups 3 and 4 (T-method, critical difference = 8.27, P = .05, df = 100).

TABLE 5.11.--Mean Scores on Indirect Measures of Freedom by Sex and Treatment Group.

Treatment Group	Independence (PVS)		Acceptance of Authority		Independence (SIV)	
	Male	Female	Male	Female	Male	Female
1. Freedom	8.58	9.91	39.83	30.66*	16.91	18.25
2. Self-Respect	7.25	9.66	37.33	38.25	19.00	15.00
3. Responsible	7.83	7.75	36.75	39.99	15.25	14.58
4. Self-Control	10.50	8.34	37.66	39.58	13.08	14.24
5. Control	8.08	9.83	41.17	37.25	15.91	18.24

*Significantly different (P = .05) from Groups 2, 3, 4, and 5 (S - Method) and 3 and 4 (T - Method).

Indirect Measures of Self-Respect, Responsible, and Self-Controlled

The three-way MANOVA's on the three remaining sets of indirect measures resulted in no significant findings. However, the treatment group means reflect a trend in which the higher means on the dependent variables are associated with their respective target groups. The treatment group means for each of the indirect measures are presented in Table 5.12.

Analysis of the Effects of Value Education on Measures of Self-Regard

Three to four weeks after value education, all patients were administered four conceptually distinct measures of self-regard. These dependent variables are designated as follows: (1) Self-esteem, (2) Self-Acceptance, (3) Self-Satisfaction, and (4) Internal versus External Locus of Control.

The major hypothesis under consideration is stated as follows:

Hypothesis 4:

> Patients who receive value education aimed at examining a particular target value will obtain higher mean scores on the four measures of self-regard three to four weeks after intervention than patients receiving a non-targeted control value education exercise.

A three-way multivariate ANOVA was used to analyze the effects of treatments and interactions between treatments and sex or diagnosis on the four dependent variables measuring self-regard observed three to four weeks after intervention. (F ratios for all sources of variance in the MANOVA and univariate ANOVAs can be found in Table P-11, Appendix P.)

TABLE 5.12.--Mean Scores for Indirect Measures of Self-Respect, Responsible, and Self-Controlled by Treatment Group.

	Treatment Group				
Indirect Measure	1 Freedom	2 Self-Respect	3 Responsible	4 Self-Controlled	5 Control
Self-Respect					
Individualism	32.92	36.75*	33.83	34.54	31.12
Leadership	9.95	11.08**	8.62	11.58	8.37
Responsible					
Social Responsibility	37.79	36.50	37.58**	36.62	36.67
Conformity	13.08	12.75	14.45*	12.29	14.29
Self-Controlled					
Self-Controlled	6.25	5.71	6.37	6.96*	6.70
Value-Determined Restraint	31.04	34.29	31.25	31.58	30.25

*Highest mean among treatment groups as predicted

**Second highest mean

Results

No significant differences in treatment main effects or interactions with treatment were found among treatment groups for the set of four measures of self-regard. While not under investigation in this study a significant diagnosis main effect was observed (Multivariate F = 2.906, P = .025, df = 4,97). The significant univariate F tests were observed on self-acceptance (F = 7.948, P = .005, df = 4,100) and self-satisfaction (F = 2.939, P = .089, df = 4,100). On both variables, psychotic patients in all experimental groups exhibited more positive self-regard than non-psychotic patients while the control group exhibited an opposite pattern. Although the treatment by diagnosis interaction was not significant, the pattern of mean scores for psychotic patients is consistent with the hypothesis. A distinction between experimental and control subjects is suggested by this trend. The mean scores for the two groups are presented in Table 5.13.

TABLE 5.13.--Mean Scores for Experimental and Control Subjects on Self-Acceptance and Self-Satisfaction by Diagnosis.

Variable	Diagnosis	Experimental	Control	Combined
Self-Acceptance:	Non-Psychotic	160.69	166.83	161.92
	Psychotic	179.10	163.25	175.94
Self-Satisfaction:	Non-Psychotic	52.71	46.75	51.52
	Psychotic	40.41	52.75	42.88

*Low means indicate higher self-satisfaction (less self minus ideal discrepancy).

Discussion of Results

The results are discussed below in the same order as presented. Trends in the data presented above, or even observed in the course of analysis, are freely discussed. Efforts are made to integrate some of the findings, relate them to the pilot study, compare treatments with one another, and to formulate some conclusions about the results and methods of analysis.

Treatment Effects on Rankings of Target Values

The results of this study indicate that the experimental value education exercise aimed at reponsible was the most generally effective of the four in increasing the rank importance of its target value. It was especially effective for psychotic patients over time. Patients receiving the "responsible exercise" exhibited a rank increase in the level of importance on responsible within two to three weeks comparable to the level pilot study subjects exhibited upon discharge from the hospital after an average length of stay of five weeks. The responsible exercise had a one-directional thrust, i.e., favorable characteristics were consistently associated with higher ranks. Therefore, it could be expected to be more consistent with the hypothesis than the freedom or self-controlled exercises. It would affect all subjects in a similar manner by maintaining high initial ranks or raising low ones. The responsible exercise may be expected to be measurably superior to the self-respect exercise based on two factors: (1) the greater stability and presumed resistance to change of a terminal value, and (2) the relatively higher entering ranks on

self-respect which place it near the "ceiling" of the 18 unit continuum. Any other important terminal values occupying higher positions than self-respect are extremely stable and effectively act as a ceiling as well.

Trends were observed across the other three exercises suggesting weak treatment effects on their target values. The freedom exercise resulted in the greatest increase in freedom rankings over time and the highest mean rank at Time II. The freedom exercise had a two-directional thrust, i.e., negative patient characteristics associated with high ranks while still emphasizing the importance of freedom. In contrast to the usual picture, psychotic patients in the freedom group had lower ranks than non-psychotics. This suggests that such a two-directional treatment thrust was operating. The information about freedom promoted an increase in ranks for non-psychotics and a decrease for psychotic patients.

The self-respect exercise was clearly the most one-directional in favoring higher ranks. It resulted in the highest mean rankings of self-respect immediately following treatment. However, these immediate effects were not maintained across time (except by non-psychotic males who typically show lowest entering ranks and greatest rank increase as a function of hospitalization). Thus, the effects of the self-respect exercise suggest experimental compliance forcing self-respect rankings upward. Since self-respect is a high ranking terminal value generally and surpassed only by a small number of the most stable and important values held by an individual, major

cognitive reorganization would be necessary to maintain increased rankings over time.

The self-controlled exercise also exhibited a trend suggesting a differential two-directional effect. Females receiving this exercise obtained the highest mean ranking of self-controlled while males received the lowest mean rankings (in contrast to each other and across their respective sex groups). This pattern is opposite the pilot study characteristics of males and females who rank self-controlled high and low, respectively. The content of the self-controlled exercise presents negative patient characteristics associated with high ranks while still emphasizing the importance of self-controlled for improved function. Thus, the pattern of mean rankings for males and females after intervention is consistent with the dual thrust of this exercise.

Treatment Effects on Target Value Variance

With a few exceptions, the results of this study consistently yielded results directly opposite those hypothesized for target value variances. Highest variances on target values as well as increased variances over time were frequently observed among experimental groups. In contrast, the control group exhibited lowest variances on three of four target values at Time I and all four target values at Time II. Two general conclusions are suggested.
(1) Targeted value education is likely to increase the variance on the target value as well as other values within the value system.
(2) A non-targeted exercise is not likely to introduce additional

variance in rankings of individual values within the system. It is possible that these findings are an artifact of the rank ordering technique or individual reactions to interventions involving both extreme upward and downward shifts in ranks.

Statistical support for the hypothesis of decreased variance induced by value education was found in highly restricted instances. The self-respect exercise yielded lowest variance for females at Time I. This finding is likely to be a function of the compliance effect noted earlier and ceiling effects associated with the nature of self-respect as a high-ranked terminal value generally, and for female patients in particular (an entering characteristic found in the pilot study). It was also noted that among all patients, non-psychotic males receiving the self-respect exercise revealed greatest decrease in variance over time. This was the only subgroup receiving the self-respect exercise to increase rankings over time. Again, a combination of a treatment effect and time (maturation) effect was likely to enhance the ceiling effect and reduce variance for this subgroup.

Statistical support for reduced variance effects of the responsible exercise was found, but restricted to male patients observed at Time II. Pilot study results revealed a substantial increase and a high mean discharge ranking of responsible (4.31) for male patients. Again, the reduced variance observed may be a ceiling effect achieved by the combined effects of treatment, time (maturation), and sex.

The subjects in the freedom exercise group exhibited the greatest increase in variance of freedom over time. This group also exhibited the greatest increase in mean rank over time and highest Time II rankings of freedom. It is suggested that the two-directional thrust likely reduced variance on freedom at Time I, while the delayed treatment effect served to increase both rankings and variance at Time II. Thus, treatment effects on rankings may have been different at Time I (two-directional) and at Time II (more one-directional) resulting in a net increase in variance over time. It should also be noted that freedom is generally ranked in the middle of the 18 unit continuum of terminal values and has greater variance than values lying toward either end.

Treatment Effects on Indirect Measures

Statistical support for the effectiveness of the freedom exercise in increasing the importance of freedom was demonstrated when freedom is measured indirectly by the variable acceptance of authority. However, only females receiving the freedom exercise exhibited significantly lower scores on this measure. In the pilot study, females exhibited greater increases in rankings of freedom than males at the time of discharge. Those results suggested that the value freedom may have special significance for females. It can be concluded that the freedom exercise is effective in producing repercussive effects within the cognitive system of females to significantly alter their attitudes and perceptions in relationship to authority. These repercussive effects are further supported by evidence of these

females placing highest importance on the two other indirect measures, independence (PVS) and independence (SIV).

While not significant upon analysis, five of the remaining six indirect measures exhibited mean scores consistent with predictions. This pattern of mean scores is clearly above chance when the value education exercises are viewed as four replications of an experimental procedure. The trends observed suggest that all of the treatments may have repercussive effects in cognition that produce observable changes in alternative measures of a given target value's importance two to three weeks after intervention.

Individualism promises to serve as an alternative construct in measuring the importance of self-respect. The measures of social responsibility and conformity gave evidence of being enhanced, for males and females, respectively, by the responsible exercise. The measure self-control resulted in highest means for females receiving the self-controlled exercise.

Treatment Effects on Self-Regard

Multivariate analysis of the set of four self-regard variables yielded no significant treatment effects of interactions with treatment. The conclusion is that self-regard was not enhanced by any of the four experimental value education exercises. The results underscore the centrality and stability of self-conceptions and their historical resistance to change by experimental interventions. The functional links between value change and enhanced self-regard will likely remain an area of investigation for years to come.

Before concluding that any studies into the relationships between value education and enhanced self-regard are not likely to be productive, there are some aspects of the present analysis of self-regard that should be noted. Analysis did reveal a diagnosis main effect with psychotic patients generally revealing greater self-acceptance and self-satisfaction (less self-ideal-self discrepancy) than non-psychotic patients. While that finding was not specifically relevant for this study, it raises interesting questions about differences in self-perception and ego defenses between the two diagnostic groups. It was further observed that the diagnosis effect was restricted to the experimental groups with the control group reflecting a slight but opposite pattern of scores. Considering only psychotic patients, all experimental versus control, these data are consistent with the major hypothesis. Using self-acceptance as an example, it is of interest to note that a contrast of all experimental versus control psychotic patients yields a t-ratio of 1.80 (significant at the .05 level). This raises the question of whether or not the method of analysis was sufficiently powerful to assess the effects of value education on self-regard. Clearly, any analysis which weights the control group appropriately against all experimental subjects may give evidence of general effects of targeted value education versus non-targeted activities. Assessing whether a specific target value has greater implications for self-regard than another is a separate and more demanding question from a methodological standpoint.

Summary of Results

The results of this study are summarized below by presenting the findings associated with each of the five treatment groups. For each group, any specific research hypotheses supported are first stated. Secondly, several types of trends related to the treatment group are stated. (1) Since each of the four experimental treatments are conceptualized as replications of a basic procedure, one type of trend presented primarily reflects predicted, but non-significant, findings occurring across the four replications. These trends are viewed as jointly supportive of the major hypotheses. (2) Trends are presented that reflect findings that are opposite prediction, yet consistent across treatments. (3) Trends reflecting differential characteristics of treatments that were anticipated are also presented. All trends are viewed as identifying areas for further study.

Treatment Group 1 (Freedom)

Hypothesis Supported:

> Female patients receiving value education aimed at freedom exhibit less acceptance of authority two to three weeks later than females in four comparison value education groups.

Trends Observed:

1. Group 1 exhibited the greatest increase over time in rankings of freedom and the highest mean ranking at Time II among the five groups.

2. Group 1 non-psychotic patients exhibited higher mean rankings on freedom than three comparison groups of non-psychotic patients.

3. Contrary to prediction, Group 1 exhibited the greatest increase in variance of freedom rankings across time.

4. Group 1 exhibited the highest mean score on independence (SIV).

5. Group 1 females and non-psychotic males exhibited the highest mean scores on independence (PVS) among their respective comparison groups.

Treatment Group 2 (Self-Respect)

Hypothesis Supported:

Female patients receiving value education aimed at self-respect exhibit less variability in their rankings of self-respect when observed immediately after intervention than females receiving value education aimed at responsible.

Trends Observed:

1. Group 2 exhibited the highest mean self-respect ranking at Time I with a slight mean decrease by Time II while all comparison groups exhibited a consistent, significant increase from Time I to Time II. (Within Group 2, only the non-psychotic male subgroup exhibited an increase in rank over time.)

2. Group 2 non-psychotic males exhibited the greatest decrease in variance of self-respect among all non-psychotic males.

3. Contrary to prediction, Group 2, as a whole, exhibited the greatest variance on self-respect rankings at Time II among the five groups.

4. Group 2 exhibited the highest mean score on individualism among all groups. (Group 2 non-psychotics obtained the highest cell means.)

5. Group 2 exhibited the second highest mean on leadership.

Treatment Group 3 (Responsible)

Hypotheses Supported:

Patients receiving value education aimed at responsible obtain higher mean rankings of responsible when observed immediately and two to three weeks after

intervention than patients receiving value education aimed at self-respect or self-control.

Psychotic patients receiving value education aimed at responsible obtained higher rankings on responsible two to three weeks after intervention than four groups of psychotic patients receiving other value education exercises.

Male patients receiving value education aimed at responsible exhibit less variability in ranking of responsible when observed two to three weeks after intervention than male patients receiving value education aimed at freedom.

Trends Observed:

1. Group 3 patients exhibited the greatest increase in rankings of responsible over time among the five groups.

2. Group 3 patients exhibited the highest mean scores on conformity among the five groups. (Group 3 females obtained the highest cell means.)

3. Group 3 males obtained the highest mean score on social responsibility among all males.

Treatment Group 4 (Self-Controlled)

Trends Observed:

1. Group 4 females exhibited the highest mean ranking of self-controlled among all females.

2. Contrary to prediction, Group 4 males exhibited the lowest mean ranking of self-controlled among all males.

3. Group 4 was the only group to exhibit a decrease in variance of self-controlled rankings over time, while exhibiting the highest overall variance (contrary to prediction).

4. Group 4 exhibited the highest mean score on self-control (indirect) among the five groups.

Treatment Group 5 (Control)

Trends Observed:

1. The control group exhibited the lowest variance on every target value at Time I and Time II with the exception of self-respect rankings at Time I.

2. Within the control group little difference was observed on self-regard measures between psychotic and non-psychotic patients. Experimental subjects exhibited significantly higher self-regard for psychotic than non-psychotic patients.

In summary, statistical support for Hypothesis 1 was provided by Treatment 3. No support was offered for Hypothesis 2. Treatment 1 provided some support for Hypothesis 3 among females. No support was offered for Hypothesis 4.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

This study was designed to assess the effectiveness of targeted value education with adult psychiatric inpatients. It represented an application of Milton Rokeach's (1973) theoretical and methodological contributions toward the understanding of human values. The first phase of this research consisted of a pilot study designed to isolate psychologically important values. Those values became the target values for each of the experimental value education exercises under investigation in the second phase of the study.

The pilot study used a sample of 58 patients who were administered the MMPI and the Value Survey upon hospital admission and discharge. The Value Survey measures the rank importance of 18 terminal values (preferable end states) and 18 instrumental values (preferable modes of conduct). Behavioral ratings were obtained from nursing staff on the MACC Behavioral Adjustment Scale for each patient at the beginning and end of hospitalization. One year after discharge, each patient's therapist was surveyed to obtain data on the patient's clinical status and likelihood of future hospitalization.

The pilot study resulted in the isolation of two terminal values, freedom and self-respect, and two instrumental values, responsible and self-controlled. Each of the four values exhibited a significant

increase in mean rank importance over the course of hospitalization. Many significant relationships were found between each target value and variables including other values, personality characteristics, diagnostic status, behavior patterns in the hospital, length of hospital stay, and likelihood of future hospitalization. The findings provided a consistent and interpretable network of relationships for each target value which amplified its psychological significance and meaning. The findings also provided ample content for designing a value education exercise aimed at each target value. In general, self-respect and responsible revealed consistent favorable clinical implications associated with higher rankings both on admission and discharge. Freedom revealed a differentiated pattern of findings in which high entering ranks were associated with unfavorable clinical characteristics, while favorable clinical implications were associated with low entering ranks, rank increases, and higher outcome ranks. Self-controlled revealed an association between unfavorable clinical characteristics and high ranks both upon admission and discharge, while favorable clinical implications were associated with low entering ranks and low rankings at discharge (even though significant increases were observed over the course of hospitalization).

In the experimental phase of this study, four experimental value education exercises were designed in a similar format, but differed in target value and content. A fifth non-targeted value education exercise was designed for use with a control group. The sample consisted of 120 incoming adult psychiatric inpatients and represented four equal subgroups of 30 based on sex and an admitting diagnosis of

psychotic or non-psychotic. Patients from each subgroup were randomly assigned to one of the five value education treatments. Subjects receiving experimental treatments first were required to rank order that set of 18 values which included their target value, while control subjects were randomly divided and asked to rank either terminal or instrumental values. Experimental subjects were then given three general types of information: (1) an indication whether their rank placement of the target value was high or low in comparison to former patients, (2) statements about characteristics of patients who rank the value high and those who rank it low, and (3) the experimenter's conclusions about the significance of the value when ranked high or low. Control subjects received only a series of experimenter's statements suggesting that values, generally, were important to understanding feelings and behavior.

Four hypotheses were advanced which predicted that targeted value education would (1) increase the mean rank importance of its respective target value, (2) reduce variability among subjects in ranking the target value, (3) enhance the importance of the value on a highly similar construct when measured by more indirect and unobtrusive alternative methods, (4) enhance self-regard on a set of four dimensions. Observations of various dependent variables were made at three times. Immediately following treatment (Time I), each subject was administered the complete Value Survey (both sets of 18 values). Two to three weeks after treatment (Time II), each subject was again administered the Value Survey and a selection of nine indirect measures of target values (a set of three variables

measuring the importance of freedom and a pair of variables corresponding to each of the other target values). Three to four weeks after treatment (Time III), each subject was administered three instruments measuring four self-regard variables.

Four separate three-way repeated measures ANOVAs were used to test for treatment main effects and simple main effects on each of the four target values' mean ranks. Levene's test was used in four three-way repeated measures ANOVAs to test for treatment main effects and simple main effects in reducing the variance of target value rankings. Four three-way MANOVAs were used to assess treatment effects on each set of indirect measures corresponding to a target value. A single three-way MANOVA was used to assess treatment effects on the set of four self-regard variables. All significant omnibus tests were followed up with contrasts using the Tukey and Sheffe methods to test for the directional differences as hypothesized.

Conclusions

The major conclusions drawn from the experimental phase of this study are summarized below under four headings corresponding to the dependent variable considered in each research hypothesis.

Target Value Ranking

Among the five treatments, only the value education exercise directed at responsible yielded statistically significant findings demonstrating its effectiveness in increasing target value rankings. Two research hypotheses were supported.

1. Value education aimed at responsible was more effective in increasing the mean rank of responsible at Times I and II than two of the comparison treatments (self-respect and self-controlled).

2. Value education aimed at responsible was most effective in increasing the mean rank of responsible for psychotic patients two to three weeks after intervention, when compared to psychotic patients receiving the four other treatments.

The measured superiority of the responsible exercise was discussed in terms of both (1) its unidirectional thrust (in contrast to the freedom and self-controlled exercises) and (2) its reduced vulnerability to ceiling effects (in contrast to the self-respect exercise). The particular effectiveness of the responsible exercise with psychotic patients is likely to be a joint function of their relatively lower entering ranks and the negative implications associated with lower ranks that was presented to them.

The three remaining experimental treatments exhibited trends suggesting weak treatment effects in the directions predicted. Freedom was ranked highest at Time II for its respective target group and particularly for non-psychotic members (who enter with lower rankings). Self-respect was ranked highest at Time I for its target group. Self-controlled was ranked highest for females and lowest for males receiving the self-controlled treatment when contrasted to other females and males. Such outcome ranks are consistent with the differing entering ranks associated with sex and the two directional thrust of the self-controlled exercise.

Variability of Target Value Rankings

In only two restricted instances did value education yield significant findings supporting the research hypothesis predicting less spread in target value rankings within targeted groups.

3. Value education aimed at self-respect was more effective in reducing variability of self-respect rankings of females immediately after intervention when compared to females receiving Treatment 3 (responsible).

4. Value education aimed at responsible was more effective than Treatment 1 (freedom) in reducing variability of responsible rankings for males two to three weeks after intervention.

Contrary to prediction, three measures of target value spread at Time I and all four measures at Time II revealed that variability in rankings was consistently lowest for the control group. Highest variances were generally exhibited by the experimental groups on the various target values. These findings led to two additional general conclusions.

5. Targeted value education increases the variance of its respective target value rankings as well as other values within the system.

6. A non-targeted intervention does not increase the variance of individual values within the system.

The specific findings in (3) and (4) above reflect exceptions to the strong trend found contrary to prediction. Those exceptions were discussed in terms of probable ceiling effects. Self-respect is generally a high ranking entering value particularly for females. Responsible is a high ranking value for males which becomes even more

important during hospitalization (maturation). Therefore, the effect of the treatments may be to immediately push self-respect near the continuum ceiling for females and to push responsible near the ceiling for males by enhancing the maturation effects occurring over the two to three week period between intervention and Time II.

Indirect Measures of Target Values

Only one of the nine indirect measures exhibited a significant change two to three weeks after interventions.

7. Value education aimed at freedom was more effective than the four other exercises in decreasing acceptance of authority in females at Time II.

Those females in the freedom target group also obtained highest mean scores on the other two indirect measures of independence (SIV and PVS). Since females, more than males, exhibit greater maturational increase in freedom's importance during hospitalization, freedom may have greater psychological importance for them. The freedom exercise was then more salient for females than males. In contrast to other females, those receiving the freedom exercise were likely to examine the concept of freedom earlier and more extensively during hospitalization resulting in subsequent repercussive cognitive changes in attitudes toward authority as predicted by value theory.

The six indirect measures for the remaining three target values did not exhibit significant changes. However, three of these measures yielded highest mean scores consistent with predictions and two yielded second highest mean scores for their respective target groups.

Measures of Self-Regard

No treatment effects on self-regard measures were found. An incidental diagnosis main effect was found in which psychotic patients exhibited greater self-regard than non-psychotic patients on two independent variables, self-acceptance and self-satisfaction. These findings, while paradoxical, are consistent with findings reported by others indicating pathological enhancement of self-regard in seriously disturbed individuals and more negative self-appraisal with subjective distress in neurotic individuals (Wylie, 1974; Worchel & McCormick, 1963).

Implications for Psychotherapy

The value education interventions in the experimental phase of this study represent a minute portion of each patient's experience during the course of intensive inpatient treatment. A typical patient's hospitalization includes individual and group psychotherapy sessions up to three times a week. The patient is given daily activity therapy classes focusing on topics such as assertion training, human development, marriage, divorce, human sexuality, managing stress, self understanding, loss and grief, and effective communication skills. Patients are provided with recreational activities, art therapy, psychodrama, educational and recreational films, and videotape experiences. Chemotherapy, special behavior modification programs, marital or family therapy, and vocational counseling may be included in treatment programs if indicated. It is within this context that the experimental value education exercises have been tested.

While the study has been conducted in a field setting, it has had a strong theoretical focus. Its primary purpose was to determine whether the educational exercises could induce changes in the rank ordering of a value that would be earlier and of greater magnitude than would be expected on the basis of hospital treatment alone. Presumably, the many therapies following the experimental intervention may provide additional reinforcing effects once the patient's attention has been directed toward a particular target value. The indirect measures provided an additional measure of the value's importance based on theorized repercussive changes in more specific cognitions related to the value.

Psychotherapists typically promote values indirectly throughout the process of therapy. The therapist's specific activities such as active listening, providing feedback, interpreting, and offering direct suggestions are centered around a specific patient's experiences and conflicts. The therapist's actions are designed to suggest a better way (i.e., a valued end-state or mode of conduct) for the patient to function. The therapeutic process in this instance is an inductive process in which the patient ultimately arrives at value generalizations based on a multitude of specific experiences and insights achieved with the therapist.

The present study suggests that therapy may profitably include a deductive approach as well. The deductive process clearly involves direct "teaching" of certain values and their implications early in therapy. Those values then provide a general framework of goals or criteria which the patient and therapist use throughout therapy.

These criteria provide a basis for evaluating the patient's functioning and deducing solutions for specific conflicts facing the patient. For example, did the patient use a preferable mode of conduct such as responsible or self-controlled? Will certain behavior lead to greater realization of a preferable end state such as self-respect or freedom? The therapeutic process involves clarifying the boundaries of these values such that the effective social relationships and the satisfaction of other's needs may be promoted as well.

The most important practical contribution of this investigation has been the explicit identification of four psychologically important values. The practicing therapist may profitably view freedom and self-respect as significant and desirable end-states toward which his patient is striving. Similarly, therapists may view responsible and self-controlled as desirable modes of conduct that may be relevant to the patient's attainment of such end-states. Consequently, these four values represent important areas of patient assessment and potential goals for therapy.

Many therapists already engage in considerable informal evaluation of their patients' behavior and attitudes as indirect manifestations of these values. Each therapist is likely to have some model of the healthy individual which implicitly dictates the relative importance of these values in his practice. Therapists promote these values in therapy to the extent that they are important in their models and perceived as deficient or unrealized in the patient's functioning.

The therapist may improve on the informal assessment of each new patient by using the Value Survey to determine the relative importance of these key values followed by some exploration of the dynamic factors contributing to the levels of rank importance observed. Each of the four target values is considered below in terms of the significant questions and issues that the therapist should address in assessing the patient's values and functioning.

Freedom

If the patient ranks freedom high (e.g., 9 to 1, as indicated in the pilot study), certain questions need to be asked. Is the patient's life situation one in which his activities are dominated by some social role or the dictates of others? Is this domination a function of the patient's inability to function self-sufficiently or imposed on him by a powerful authority figure? Does the patient's behavior justify restrictions being placed on him? To what extent does the patient appreciate the realistic limits of personal freedom determined by the needs of others and society? Is the patient's high ranking of freedom a reflection of his egalitarian ideology or a strictly personal concern over his freedom? If freedom is ranked low (12 to 18), does the patient exercise his freedom and feel free of unnecessary external restrictions in his life? Or does the patient have a narrow, underrated concept of freedom and fail to recognize areas where he may function more independently and use opportunities which ultimately enhance his life? The answers to such questions will provide direction and goals in therapy specifically aimed at realizing

the psychological benefits of freedom while retaining the benefits of satisfying interpersonal relationships. The experimental study demonstrated that for female patients, examination of the value freedom led to a change in attitude toward authority. This change is not necessarily a rejection of authority, but may reflect increased capacity to define one's own rights and discriminate legitimate demands stemming from authority whether its source be individual, institutional, or societal. Healthy ego functioning involves the capacity to satisfy organismic needs within the context of external reality. Clarification and differentiation of a value and determining its relative importance will promote ego development. An integrated self, personal competence, and similar constructs in theories of psychopathology and therapy all involve the use of a value system both as a tool for defining the self and making decisions in response to the external world. The value freedom represents one in which a personal need is conceptualized as a goal or ideal for the self and also is assigned some priority among other values to allow for successful social adjustment. Freedom as an abstract conception becomes a value only in preference to the concept of no freedom. Reality and other values prevent its absolute realization.

Self-Respect

When the therapist turns his attention to assessing the patient's ranked importance of self-respect, another set of questions needs to be asked based on this investigation. If self-respect is ranked high in importance (4 to 1), does the patient experience a deficiency in self-esteem or simply recognize the importance of self-respect as

psychologically important end-state? The results of this investigation and others suggest that less disturbed patients (non-psychotic, neurotic) experience greater dissatisfaction with themselves and are more self-critical, yet are better candidates for therapy and also recognize the importance of self-respect. Indeed, when self-respect is a high ranking value, the therapist may be dealing with a patient who has essentially mastered the survival, security, identity, and belonging needs outlined by Maslow (1954) and is now struggling with self-esteem needs. On the other hand, the more disturbed individuals (psychotics, borderline personality disorders) have severe deficiencies in self-identity, self-integration, and trust and security in interpersonal relationships. For such patients, self-respect or self-esteem is maintained in primitive psychopathological ways involving significant distortions of self and others. In a sense, a real concern with self-esteem is deferred until these patients master the task of establishing a stable self. Consequently, when the therapist observes a low rank (9-18) on self-respect, the first question concerns the development of the self. Does the patient possess a self as a sufficiently stable object differentiated from other individuals which can be subjected to internal evaluation and held in esteem? If self-respect is ranked low, is the patient confusing it with selfishness, oriented toward others, or failing to acknowledge the importance positive self-regard has as a necessary prerequisite for mature functioning?

Responsible

As an instrumental value, responsible represents a mode of conduct preferable to not being responsible. Rokeach (1967) further defined this value as being dependable and reliable which places it in social context. However, in the hospital milieu therapy responsibility is often promoted in a personal sense. Patients are encouraged to "own their feelings," make their own decisions, avoid blaming others for their difficulties, and relinquish their helpless or victimized roles. Being responsible may mean asserting oneself in the face of inappropriate demands or impositions from others. These two facets of being responsible (socially and personally) have corresponding implications for interpersonal and intrapersonal adjustment.

If a patient ranks responsible high (6 to 1), he likely possesses a strong sense of social responsibility based on this study's findings. However, does he feel deficient in his conduct as a socially responsible person? Does he sacrifice self-respect or freedom due to excessive deference to the desires of others? Does he appreciate the need to exercise personal responsibility toward himself as an object? If a patient ranks responsible low (8-18), does the patient underestimate the benefits of responsible behavior? Does his more regressed status (as suggested by this study), mean that responsible behavior seems irrelevant or out of reach for the patient?

The experimental study showed that psychotic patients were able to place a higher priority on responsible conduct once they were given information suggesting its benefits. This effect was not immediate, but most apparent two to three weeks after intervention.

This delay in changing argues against experimental compliance or suggestibility. Instead, these patients were able to carefully process the information and reformulate over time either their definition or priority of being responsible. This finding should suggest to the practicing therapist that a value can be addressed directly in the early stages of treatment. The patient can be assisted in clarifying the value's significance and importance and, then, offered credible information in an educational manner for his consideration. The patient can freely, over time, reformulate his cognitions in a way that is internally congruent for him.

Self-Controlled

Self-control as a value has little intrinsic benefit. It defies the pleasure principle and requires that one tolerate stress and control pressing impulses. It is clearly a means-to-an-end and a prime example of an instrumental value. The present study clearly demonstrated that patients most deficient in this mode of conduct place greater ranked importance on this value, while those with greater observed self-control rank it low.

If a patient enters therapy ranking self-controlled high (6 to 1), the therapist must determine whether the patient has realized the benefits of self-control or is deficient. In the case of deficiency, major therapeutic work will be aimed at developing impulse control, stress tolerance, and a capacity to delay gratification in a patient who may have severe ego defects or inadequate social orientation. If the patient enters therapy with relatively low rankings on self-controlled (11 to 18), the therapist determines whether the patient

can benefit from placing higher general importance on self-controlled. Does the patient only need new directions for exercising his capacity for self-control? Is the patient excessively self-controlled in some respects?

A trend was noted in the experimental study for high ranking patients (males) and low ranking patients (females) to decrease and increase their ranks respectively after receiving information about the deficiency nature of high ranks and the undervaluation implicated by low ranks. Again, the therapist may explore his patients actual self-control in the light of the importance placed on self-controlled and, early in therapy, provide educational information designed to modify the value and associated behavior. One indirect measure of self-control as a value showed a trend toward increased importance for all subjects receiving the self-controlled exercise. This indicates that a value may drop in rank importance, while increasing in cognitive importance. The therapeutic importance of values as expressions of the patient's needs as well as ideals is underscored by such deficiency motivated high ranks. Paradoxically, the patient's highest "values" may indicate the direction for therapeutic intervention.

Interrelationship of the Four Values

The four target values provide a preliminary composite picture of the ingredients of mental health. Based on their observed rankings in this study, the four values themselves may be placed in a hierarchical arrangement with self-respect at the top followed by

freedom, responsible and self-controlled. Since enhancement of the self-concept and self-esteem reflects the dominant goal in most therapies, it is appropriate that self-respect as a personal value, basic need, or criterion for mental health should occupy this paramount position. Respect for self dictates and facilitates the attainment of freedom to its fullest expression without imposing on the freedom of others. Exercise of freedom in this manner allows for satisfactory interpersonal relationships and social adjustment. It does not jeopardize respect for self by violating social moral values. Nor does it allow for loss of self-respect by submission to the demands or judgements of others. The sufficient self possesses positive regard for self and the capacity to choose and act freely in full contact with reality.

The modes of conduct for day-to-day functioning which lead to and maintain the end states of self-respect and freedom are, at least partially, embodied in responsible and self-controlled behavior. Responsibility for self and others requires self-control in order to competently deal with and master social reality. Internal control facilities responsible as well as independent choices and actions. These activities enable an individual to develop and maintain a state of relative freedom and self-respect and, yet, pursue and promote social values and the welfare of others. Neglect of one's own welfare jeopardizes self-respect through shame and inadequacy stemming from dependence on others. Neglect of others' welfare jeopardizes self-respect through guilt due to violations of moral values requiring respect for humanity in addition to self.

The Therapist's Values

Lowe (1969) has distinguished four value orientations among therapists. (1) Naturalism reflects a concern with need-satisfaction values. (2) Culturalism emphasizes values leading to social adaptation. (3) Humanism is concerned with self-actualization values. (4) Theism places importance on values leading to personal integration and development of a life philosophy. The four values investigated in this study are most consistent with the humanistic orientation. Furthermore, they are conpatible with western culture's emphasis on the individual (Buhler, 1962). However, the values investigated in this study clearly cross all orientations in that they reflect needs-to-be-satisfied that fall in an intermediate area of Maslow's path toward self-actualization. They allow for need fulfillment within a context of social adaptation governed by certain modes of conduct. These values do not preclude development beyond self-actualization to levels of personal integration and commitment extending beyond the self. For example, a world at peace may have little immediate psychological relevance to a person struggling with a need to belong or low self-esteem. Yet that same value may become a passionate goal for an individual who has mastered and transcended the problems of adjustment and self-esteem encountered in the therapy setting.

The successful therapist must be able to examine his patient's values as an index of that patient's level of development. Therapeutic goals are directed by the needs of that level and the developmental tasks of the next level. The model of development is the

therapist's professional theoretical orientation and not the salient values reflecting his personal level of development. Presumably, the therapist has succeeded to some degree in mastering the tasks facing his patient and has the skill to facilitate similar development in his patient. The therapist may subscribe to self-actualization values without being self-actualized. He may even struggle with developing his own sense of self-esteem and be able to help his patient do the same. The therapist who is deficient in empathic skills would likely fail in trying to help an individual who has a capacity for empathy and is struggling toward enhancement of self-regard. The therapist who would attempt to impose either his personal or theoretically oriented values on a patient without regard for the patient's developmental status might expect to fail. If the patient enters with a need to deal with those values, the therapist may be able to communicate and promote change. Indeed, successful treatment has frequently rested on a fairly high pre-existing degree of similarity between therapist and patient (Ehrlich & Wiener, 1961). At present, the Value Survey may serve as a tool for investigating such therapist-patient similarities. Empirical work needs to be done in differentiating between therapist's personal and mental health value systems and observing which are relevant to the process of change as the patient's values move in the direction of the therapist's values.

Implications for Future Research

Limitations in the Present Study

Since each of the four experimental treatments may be viewed as a replication of the basic value education format, the trends which appear across these replications suggest two areas of possible weakness in the present study. (1) The interventions may have been too mild to generate changes of sufficient magnitude to be detected. (2) The experimental methodology used in this study was not sufficiently powerful to detect the effects predicted.

Potency and Direction of Treatment Effects. The potency of a value education intervention is ultimately defined by the cognitive and behavioral changes it produces. Setting questions of measurement aside, it is important to note those factors in the present study which are likely to mask the potency of the interventions used. First, the theorized stability of the constructs, values and self-conceptions, in contrast to other cognitions implies that value change will be difficult and the magnitude of change small. Second, the target values used in this study were selected because they exhibited a maturational history (during hospitalization) of increasing in importance. Therefore, any intervention designed to facilitate this maturational course must effect changes in rank of greater magnitude than comparison groups which are not static, but changing in the same direction predicted for the target group. Third, the interventions used in this study were likely to have differential effects on subjects as a function of their entering ranks. In most cases, either

maintenance or enhancement of the rank importance of the target value would be encouraged. In some cases, a decrease in rank importance would be effected by the intervention. Consequently, treatment potency measured in terms of higher mean ranks is partially dissipated by subjects whose appropriate response to treatment includes a decrease in the level of target value importance.

Methodological Weaknesses. The trends observed in this study strongly suggest that the methodology employed did not provide sufficient precision and power in testing the null hypotheses. The most obvious factor likely affecting precision in this study was the use of only six subjects per cell. A more precise replication of the present study might use two or three times the number of subjects per cell. A second factor suggesting insufficient precision concerns the possibility of greater variability on measures of dependent variables for the psychiatric population generally in contrast to other populations. This is suggested by the mean entering rank levels of the target values falling in the middle of the 18 unit continua. A middle mean rank for the group may reflect a fairly balanced spread of scores (variance) or many scores falling in the middle "unstable" region of the continuum (introducing less reliability for this population). Another source of variability is suggested by the observed trend toward increased spread of target value rankings following treatment, i.e., variance introduced simply by intervention which lowers precision.

The design and analysis used only post-treatment observations. The question may be raised whether greater precision might have been obtained by using an analysis of covariance approach based on pre-treatment rankings of target values or using pre-treatment ranks as an additional blocking variable. The format for analysis used in this study employed omnibus tests followed by post hoc methods. It was noted in Chapter IV that some loss of power could be associated with this approach in contrast to an analysis using the method of planned comparisons.

The discussion above provides several general implications for any future replication of the present study. (1) Increase the sample size by a factor of two or even three. (2) Use pretreatment observations of target value rankings in assessing treatment effects. (3) Consider the method of planned comparisons as a more powerful analytical approach.

Focusing Inquiry on Single Values

Since values are limited in number and regarded as highly central within cognition, empirical studies of values should appropriately focus on a single value, except when the functional relationship between two values are under investigation. From such a perspective, the present study may be analogous to investigating attitudes toward fast food restaurants and school busing within the context of a single study.

The substantive and functional characteristics of two different values may be dramatically different even if they share a common

denominator of being "psychologically important" by some operational criterion. A value may be psychologically important for one population and not for another. The same value may be important for different reasons, i.e., intrinsic objective importance versus deficiency importance. A value may vary in semantic aspects, level of abstraction, and differentiation of domains of applicability.

While certain dimensions (such as content, importance, commitment, benefits, beneficiaries, or domain of application) may be common to all values, inquiry centered on a particular value would continue to require correlational approaches to specify the range of individual differences and modal points on those dimensions which characterize that particular value. For example, the value freedom may have a highly restricted meaning for one individual with corresponding restrictions and functional properties on other dimensions. Research centered solely on freedom would map only its substantive and functional characteristics within the personality system including those attitudes and behaviors which can be reliably associated with variations in those characteristics. Ultimately, a body of data concerning the nature of freedom would be developed which might depict a variety of conceptions of freedom. More reliable methods of measuring freedom both as a value and as a "state" achieved at some level are necessary in order to ultimately investigate issues related to ideal versus deficiency sources of value. At present, the general concept of a value may be viewed as a kind of "metaconstruct" whose ultimate nature may be understood only when the nature of separate values are understood.

The implication of such issues is that a given value has many parameters which need to be thoroughly investigated. The characteristics of a particular value may dictate its role in cognition and personality functioning as well as the most effective methods for inducing change, rather than any general theory of values or cognition at present. The suggestion is that inquiry should proceed from understanding the nature of particular values to the nature of values generally.

The Development of Alternative Value Measures

The Value Survey has demonstrated usefulness in many empirical investigations. However, from the perspective of a given value it must be regarded as measuring only one dimension of that value, i.e., its rank importance relative to those values included in the ranked set. It is possible to conceive of instruments which are designed to measure individual differences on a number of dimensions of a specific value. In addition to some measure of rank importance, a dimension of concreteness versus abstractness of meaning might be included which would essentially define the domains where the value is salient for a given subject. A continuum measuring the degree of deficiency or realization of the value experienced by the subject would reflect a motivational characteristic of the value. Other motivational features might include delineation of the type of affective responses (shame or pride, guilt or worthiness) associated with a given value and the intensity of feeling associated with violations and manifestations of the values.

The examples above are only a few of many possible dimensions to consider in measuring values. Those items in existing value scales which are highly correlated with a certain value's rank may provide the basis for more reliable measures of the value's importance. A large pool of items may ultimately provide a basis for a factor analytic approach in delineating salient dimensions of a given value.

A Microscopic Approach to Understanding Value Change

By simultaneously investigating four target values, the present study has offered only a macroscopic examination of value change and repercussive effects. This study has not addressed the mechanisms of cognitive change in any detail. Future research efforts may be more profitable by taking a more singular approach to value education and cognitive change as well. Such an approach would focus on a single target value and perhaps vary the salient content of the value education treatment. For example, a study of value education targeted on freedom might include a comparison of approaches giving positive, negative, or combined information or approaches giving information about either low ranking or high ranking individuals. The different approaches may be crossed with subjects with different entering rank levels in an effort to determine the most potent aspects of value education content and their relative impact on subjects with different entering positions on the value. Such strategies may be more effective in assessing the effects of interventions with a two-directional thrust than observations of deviation scores.

The Role of Self-Regard in Value Research

The integration of existing self theory and value theory has barely begun. The present study underscores the stability of self-conception reflected by global measures of self-regard. It is probably of little value to examine value education effects on global self-regard until those values which have a significant bearing on self-esteem have been identified. It may prove to be true that no single value possesses a measurable relationship of global self-regard. Instead, certain values contribute differentially as a function of the value's importance and only those self-perceptions relevant to the value. Self minus ideal-self measures of self-regard are based on such discrepancies and illustrate the confounding role of values in self-regard measures. The Value Survey itself could be modified and administered with additional instructions to rank order the labels according to "time invested" or "success in achieving" the items. A discrepancy score could be computed and inferred as a measure of self-regard or self-satisfaction. The discomfort some subjects express while rank ordering "values" probably reflects the simultaneous awareness and comparison with their actual behavior patterns. A measure of this discomfort could also be construed as a measure of self-regard.

Studies in the near future may profitably use measures of self-esteem as one entering characteristic to be mapped to the measures of a particular value or as an independent variable that influences a subject's response to value education. Shrauger (1975) has suggested

that there is more evidence supporting self-esteem theory than cognitive consistency theory in terms of the subject's affective reaction to external evaluations. Low self-esteem individuals react more strongly to either positive or negative evaluative information than their high self-esteem counterparts. However, when cognitive processes involved in the interpretation and retention of evaluative information are examined, research data support the cognitive consistency model. Given the present state of value inquiry, level of self-esteem may be more useful as an independent variable with differential effects on both affective and cognitive responses to value education interventions rather than as an outcome variable.

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APPENDICES

APPENDIX A

THE ROKEACH VALUE SURVEY

APPENDIX A

FORM D

THE ROKEACH VALUE SURVEY

VALUE SURVEY

BIRTH DATE_____ SEX: MALE_____ FEMALE_____

CITY and STATE OF BIRTH_____

NAME (FILL IN ONLY IF REQUESTED)_____

HALGREN TESTS
873 PERSIMMON AVE
SUNNYVALE, CALIFORNIA 94087

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.

1	
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5	
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13	
14	
15	
16	
17	
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)

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE.

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

1	
2	
3	
4	
5	
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9	
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16	
17	
18	

AMBITIOUS
(hard-working, aspiring)

BROADMINDED
(open-minded)

CAPABLE
(competent, effective)

CHEERFUL
(lighthearted, joyful)

CLEAN
(neat, tidy)

COURAGEOUS
(standing up for your beliefs)

FORGIVING
(willing to pardon others)

HELPFUL (working for the welfare of others)

HONEST
(sincere, truthful)

IMAGINATIVE
(daring, creative)

INDEPENDENT
(self-reliant, self-sufficient)

INTELLECTUAL
(intelligent, reflective)

LOGICAL
(consistent, rational)

LOVING
(affectionate, tender)

OBEDIENT
(dutiful, respectful)

POLITE
(courteous, well-mannered)

RESPONSIBLE
(dependable, reliable)

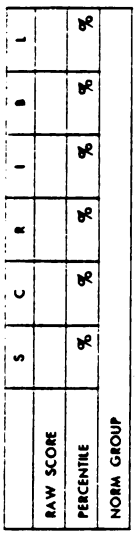
SELF-CONTROLLED
(restrained, self-disciplined)

APPENDIX B

SURVEY OF INTERPERSONAL VALUES

APPENDIX B

SURVEY OF INTERPERSONAL VALUES



Name _____ Date _____ Marital Status _____

Grade or Occupation _____

School or Firm _____

SURVEY OF INTERPERSONAL VALUES

By LEONARD V. GORDON

DIRECTIONS

In this booklet are statements representing things that people consider to be important to their way of life. These statements are grouped into sets of three. This is what you are asked to do:

Examine each set. Within each set, find the **one statement** of the three which represents what you consider to be **most important** to you. Blacken the space beside that statement in the column headed M (for **most**).

Next, examine the remaining two statements in the set. Decide which **one** of these statements represents what you consider to be **least important** to you. Blacken the space beside that statement in the column headed L (for **least**).

For every set you will mark **one statement** as representing what is **most important** to you, **one statement** as representing what is **least important** to you, and you will leave **one statement unmarked.**

Example

	M	L
To have a hot meal at noon		▬
To get a good night's sleep		
To get plenty of fresh air	▬	

Suppose that you have examined the three statements in the example, and although all three of the statements may represent things that are important to you, you feel that "To get plenty of fresh air" is the **most important** to you. You would blacken the space in the column headed M (for **most**) beside the statement. Notice that this has been done in the example.

You would then examine the remaining two statements to decide which of these represents something that is **least important** to you. Suppose that "To have a hot meal at noon" is the **least important** to you. You would blacken the space in the column headed L (for **least**) next to this statement. Notice that this has been done in the example.

You would leave the remaining statement unmarked.

In some cases it may be difficult to decide which statement to mark. Make the best decision that you can. This is not a test; there are no right or wrong answers. Be sure to mark **only one M (most)** choice and **only one L (least)** choice in a set. Do not skip any sets. Answer every set. Turn this booklet over and begin.

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Mark your answers in column A ⟶ A

	M	L
To be free to do as I choose		
To have others agree with me		
To make friends with the unfortunate		
	M	L
To be in a position of not having to follow orders		
To follow rules and regulations closely		
To have people notice what I do		
	M	L
To hold an important job or office		
To treat everyone with extreme kindness		
To do what is accepted and proper		
	M	L
To have people think of me as being important		
To have complete personal freedom		
To know that people are on my side		
	M	L
To follow social standards of conduct		
To have people interested in my well being		
To take the lead in making group decisions		
	M	L
To be able to do pretty much as I please		
To be in charge of some important project		
To work for the good of other people		
	M	L
To associate with people who are well known		
To attend strictly to the business at hand		
To have a great deal of influence		
	M	L
To be known by name to a great many people		
To do things for other people		
To work on my own without direction		
	M	L
To follow a strict code of conduct		
To be in a position of authority		
To have people around who will encourage me		
	M	L
To be friends with the friendless		
To have people do good turns for me		
To be known by people who are important		
	M	L
To be the one who is in charge		
To conform strictly to the rules		
To have others show me that they like me		
	M	L
To be able to live my life exactly as I wish		
To do my duty		
To have others treat me with understanding		
	M	L
To be the leader of the group I'm in		
To have people admire what I do		
To be independent in my work		
	M	L
To have people act considerately toward me		
To have other people work under my direction		
To spend my time doing things for others		
	M	L
To be able to lead my own life		
To contribute a great deal to charity		
To have people make favorable remarks about me		

Turn the page and go on.

Mark your answers in column B ⟶ B

	M	L
To be a person of influence		
To be treated with kindness		
To always maintain the highest moral standards		
	M	L
To be praised by other people		
To be relatively unbound by social conventions		
To work for the good of society		
	M	L
To have the affection of other people		
To do things in the approved manner		
To go around doing favors for other people		
	M	L
To be allowed to do whatever I want to do		
To be regarded as the leader		
To do what is socially correct		
	M	L
To have others approve of what I do		
To make decisions for the group		
To share my belongings with other people		
	M	L
To be free to come and go as I want to		
To help the poor and needy		
To show respect to my superiors		
	M	L
To be given compliments by other people		
To be in a very responsible position		
To do what is considered conventional		
	M	L
To be in charge of a group of people		
To make all of my own decisions		
To receive encouragement from others		
	M	
To be looked up to by other people		
To be quick in accepting others as friends		
To direct others in their work		
	M	L
To be generous toward other people		
To be my own boss		
To have understanding friends		
	M	L
To be selected for a leadership position		
To be treated as a person of some importance		
To have things pretty much my own way		
	M	L
To have other people interested in me		
To have proper and correct social manners		
To be sympathetic with those who are in trouble		
	M	L
To be very popular with other people		
To be free from having to obey rules		
To be in a position to tell others what to do		
	M	L
To always do what is morally right		
To go out of my way to help others		
To have people willing to offer me a helping hand		
	M	L
To have people admire me		
To always do the approved thing		
To be able to leave things lying around if I wish		

S	C	R	I	B	L	

APPENDIX C

PERSONAL VALUE SCALES

APPENDIX C

PERSONAL VALUE SCALES

PART IV

INSTRUCTIONS

Please read over the following statements. Decide whether it is something you always admire in other people, or something you always dislike, or something that depends on the situation whether you admire it or not.

Check one space behind each statement for your answer.

		Always Admire	Depends on Situation	Always Dislike
*1.	Showing one's feelings readily.			
2.	Being different from other people.			
*3.	Replying to anger with gentleness.			
4.	Keeping one's opinions to himself when they differ from the group's.			
*5.	Letting off steam when one is frustrated.			
6.	Standing up for what one thinks right, regardless of what other's think.			
*7.	Always being patient with people.			
8.	Acting so as to fit in with other people's way of doing things.			
*9.	Letting people know when one is annoyed with them.			
10.	Encouraging other people to act as they please.			
*11.	Not getting upset when things go wrong.			
12.	Working and living in harmony with other people.			
*13.	Becoming so angry that other people know about it.			
14.	Living one's own life, independent of others.			
*15.	Keeping one's hostile feelings to himself.			
16.	Suppressing one's desire to be unique and different.			
*17.	Swearing when one is angry.			
18.	Being a non-conformist.			
*19.	Suppressing the urge to speak hastily in anger.			

(*) indicates self-control items.
Independence items are unmarked.

		Always Admire	Depends on Situation	Always Dislike
20.	Never acting so as to violate social conventions	_____	_____	_____
* 21.	Letting others see how one really feels.	_____	_____	_____
22.	Going one's own way as he pleases.	_____	_____	_____
* 23.	Hiding one's feelings of frustration from other people.	_____	_____	_____
24.	Always checking on whether or not one's intended actions would be acceptable to other people.	_____	_____	_____
* 25.	Getting upset when things don't go well.	_____	_____	_____
26.	Being outspoken and frank in expressing one's likes and dislikes.	_____	_____	_____
* 27.	Keeping one's feelings hidden from others.	_____	_____	_____
28.	Always basing one's behavior on the recognition that he is dependent.	_____	_____	_____
* 29.	Expressing one's anger openly and directly when provoked.	_____	_____	_____
30.	Thinking and acting on one's own without social restraints.	_____	_____	_____
* 31.	Suppressing hostility.	_____	_____	_____
32.	Being careful not to express an idea that might be contrary to what other people believe.	_____	_____	_____
* 33.	Telling people off when they offend one.	_____	_____	_____
34.	Being a person who doesn't care what others think of his opinions.	_____	_____	_____
* 35.	Not expressing anger, even when one has a reason for doing so.	_____	_____	_____
36.	Acting in such a way as to gain the approval of others.	_____	_____	_____
37.	Depending on others.	_____	_____	_____
38.	Being original.	_____	_____	_____
* 39.	Never losing one's temper, no matter what the reason.	_____	_____	_____
40.	Going along with the crowd.	_____	_____	_____
* 41.	Losing one's temper easily.	_____	_____	_____
42.	Conforming to the requirements of any situation and doing what is expected of one.	_____	_____	_____

APPENDIX D

VALUE PROFILE SCALES AND SOCIAL RESPONSIBILITY SCALE

PART V

INSTRUCTIONS

On the following pages you will find a series of general statements expressing opinions or attitudes of the kind you may have heard from other persons around you.

Read each statement and mark one of the six answers which best tells your reaction to the opinion expressed.

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
±1.	Obedience and respect for authority are the most important virtues children should learn.						
*2.	Tenderness is more important than passion in love.						
#3.	To be superior a man must stand alone.						
4.	It is no use worrying about current events or public affairs; I can's do anything about them anyway.						
±5.	There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.						
*6.	Since there are no values which can be eternal, the only real values are those which meet the needs of the given moment.						
#7.	In life an individual should for the most part "go it alone," assuring himself of privacy, having much time to himself, attempting to run his own life.						
8.	Every person should give some of his time for the good of his town or country.						
±9.	What youth needs most is strict discipline, rugged determination, and the will to work and fight for for family and country.						

(±) acceptance of authority scale; (*) need-determined expression versus value-determined restraint scale; (#) individualism scale; (unmarked) social responsibility scale

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
* 10.	No time is better spent than that devoted to thinking about the ultimate purposes of life.						
# 11.	It is the man who stands alone who excites our admiration.						
12.	Our country would be a lot better off if we didn't have so many elections and people didn't have to vote so often.						
± 13.	You have to respect authority and when you stop respecting authority, your situation isn't worth much.						
* 14.	Nothing is static, nothing is everlasting, at any moment one must be ready to meet the change in environment by a necessary change in one's moral views.						
# 15.	The rich internal world of ideals, of sensitive feelings, of reverie, of self knowledge, is man's true home.						
16.	Letting your friend's down is not so bad because you can't do good all the time for everybody.						
± 17.	Patriotism and loyalty are the first and the most important requirements of a good citizen.						
* 18.	Not to attain happiness, but to be worthy of it, is the purpose of our existence.						
# 19.	One must avoid dependence upon persons or things, the center of life should be found within oneself.						
20.	It is the duty of each person to do his job the very best he can.						
± 21.	Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.						

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
* 22.	Let us eat, drink, and be merry, for tomorrow we die.	_____	_____	_____	_____	_____	_____
# 23.	The most rewarding object of study any man can find is his own inner life.	_____	_____	_____	_____	_____	_____
24.	People would be a lot better off if they could live far away from other people and never have to do anything for them.	_____	_____	_____	_____	_____	_____
± 25.	A child should not be allowed to talk back to his parents, or else he will lose respect for them.	_____	_____	_____	_____	_____	_____
* 26.	The solution to almost any human problem should be based on the situation at the time, not on some general moral rule.	_____	_____	_____	_____	_____	_____
# 27.	Whoever would be a man, must be a non-conformist.	_____	_____	_____	_____	_____	_____
28.	At school I usually volunteered for special projects.	_____	_____	_____	_____	_____	_____
± 29.	The facts on crime and sexual immorality show that we will have to crack down harder on young people if we are going to save our moral standards.	_____	_____	_____	_____	_____	_____
* 30.	Life is something to be enjoyed to the full, sensuously enjoyed with relish and enthusiasm.	_____	_____	_____	_____	_____	_____
# 31.	Contemplation is the highest form of human activity.	_____	_____	_____	_____	_____	_____
32.	I feel very bad when I have failed to finish a job I promised I would do.	_____	_____	_____	_____	_____	_____
± 33.	Disobeying an order is one thing you can't excuse — if one can get away with disobedience, why can't everybody?	_____	_____	_____	_____	_____	_____
* 34.	Life is more a festival than a workshop or a school for moral discipline.	_____	_____	_____	_____	_____	_____
# 35.	The individualist is the man who is most likely to discover the best road to a new future.	_____	_____	_____	_____	_____	_____

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
±36.	A well-raised child is one who doesn't have to be told twice to do something.	_____	_____	_____	_____	_____	_____
*37.	The past is no more, the future may never be, the present is all that we can be certain of.	_____	_____	_____	_____	_____	_____
#38.	A man can learn better by striking out boldly on his own than he can be following the advice of others.	_____	_____	_____	_____	_____	_____

APPENDIX E

SELF-ESTEEM SCALE

APPENDIX E

SELF-ESTEEM SCALE

PART VII

INSTRUCTIONS

Read each statement below
Behind each statement, mark one of the four spaces
with an "X" to show what you feel about yourself..

		Strongly Agree	Agree	Disagree	Strongly Disagree
* 1.	I feel that I'm a person of worth, at least on an equal plane with others.	____	____	____	____
2.	I would rather decide things when they come up than always try to plan ahead.	____	____	____	____
* 3.	I feel that I have a number of good qualities.	____	____	____	____
4.	I have always felt pretty sure my life would work out the way I wanted it to.	____	____	____	____
* 5.	All in all, I am inclined to feel that I am a failure.	____	____	____	____
6.	I seem to be the kind of person that has more bad luck than good luck.	____	____	____	____
* 7.	I am able to do things as well as most other people.	____	____	____	____
8.	I never have any trouble making up my mind about important decisions.	____	____	____	____
* 9.	I feel I do not have much to be proud of.	____	____	____	____
10.	I have always felt that I have more will power than most people have.	____	____	____	____
* 11.	I take a positive attitude toward myself.	____	____	____	____
12.	There's not much use for me to plan ahead because there's usually something that makes me change my plans.	____	____	____	____
* 13.	On the whole, I am satisfied with myself.	____	____	____	____
14.	I nearly always feel pretty sure of myself even when people disagree with me.	____	____	____	____
* 15.	I wish I could have more respect for myself.	____	____	____	____
* 16.	I certainly feel useless at times.	____	____	____	____
17.	I have often had the feeling that it's no use to try to get anywhere in this life.	____	____	____	____
* 18.	At times I think I am no good at all.	____	____	____	____

(*) items included in the self-esteem scale

APPENDIX F

INDEX OF ADJUSTMENT AND VALUES

PART VI

INSTRUCTIONS

On the following pages, you will find a list of words that describe people to a certain degree.

FIRST - Take each word in Column 1 and apply it to yourself by completing the sentence: "I am a (an) _____ person."

SECOND - Go to Column 2 and decide HOW MUCH OF THE TIME that sentence describes you. Circle one number as your answer.

THIRD - Go to Column 3 and tell HOW YOU FEEL about yourself as described in Column 2. Again, circle one number.

FOURTH - Go to Column 4 and decide HOW MUCH OF THE TIME you would like the word to be characteristic of you. Circle one number.

After you have finished with one word, go back to Column 1 and do the same thing with the next word in each column and so on.

EXAMPLE

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4
Word List	HOW MUCH OF THE TIME is this like you?	HOW DO YOU FEEL about yourself as described in Column 2?	HOW MUCH OF THE TIME WOULD YOU LIKE TO BE like this?
"I am a ___ person"	"This is like me ....."	"Being as I am in this respect is something I ...."	"I would like to be like this ...."
ACADEMIC	Seldom (1) Occasionally (2) About half the time (3) A good deal of the time (4) Most of the time (5)	Very much dislike (1) Dislike (2) Neither like nor dislike (3) Like (4) Like Very much (5)	Seldom (1) Occasionally (2) About half the time (3) A good deal of the time (4) Most of the time (5)

In Column 2, this person circled the number 5 which means that he describes himself as being "academic" most of the time.

In Column 3, he circled number 1 which means that he very much dislikes being this way.

In Column 4, he circled number 3 which means he would like to be "academic" about half the time.

COLUMN 1	COLUMN 2					COLUMN 3					COLUMN 4				
Word List	HOW MUCH OF THE TIME is this like you?					HOW DO YOU FEEL about yourself as described in Column 2?					HOW MUCH OF THE TIME WOULD YOU LIKE TO BE like this?				
"I am a ____ person"	"This is like me ....."					"Being as I am in this respect is something I ...."					"I would like to be like this ...."				
	Seldom	Occasionally	About half the time	A good deal of the time	Most of the time	Very much dislike	Dislike	Neither like nor dislike	Like	Like Very much	Seldom	Occasionally	About half the time	A good deal of the time	Most of the time
BUSY	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CHARMING	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
ACCURATE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
NERVOUS	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
ANNOYING	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CALM	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CLEVER	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
RELIABLE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
SARCASTIC	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
STABLE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
STUDIOUS	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CONSIDERATE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
STUBBORN	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
EFFICIENT	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
FRIENDLY	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
FASHIONABLE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
BROAD-MINDED	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
BUSINESSLIKE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
COMPETITIVE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

COLUMN 1	COLUMN 2					COLUMN 3					COLUMN 4				
Word List	HOW MUCH OF THE TIME is this like you?					HOW DO YOU FEEL about yourself as described in Column 2?					HOW MUCH OF THE TIME WOULD YOU LIKE TO BE like this?				
"I am a ____ person"	"This is like me ....."					"Being as I am in this respect is something I ...."					"I would like to be like this ...."				
	Seldom	Occasionally	About half the time	A good deal of the time	Most of the time	Very much dislike	Dislike	Neither like nor dislike	Like	Like Very much	Seldom	Occasionally	About half the time	A good deal of the time	Most of the time
MATURE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
ACCEPTABLE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
MERRY	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
AMBITIOUS	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
OPTOMISTIC	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
PURPOSEFUL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
COMPETENT	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
RESTRAINED	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CONFORMING	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CRUEL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
SUCCESSFUL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
DEPENDABLE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
DISCIPLINED	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
FEARFUL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
USEFUL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
HELPFUL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
INDEPENDENT	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
KIND	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
LOGICAL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

COLUMN 1	COLUMN 2					COLUMN 3					COLUMN 4				
Word List	HOW MUCH OF THE TIME is this like you?					HOW DO YOU FEEL about yourself as described in Column 2?					HOW MUCH OF THE TIME WOULD YOU LIKE TO BE like this?				
"I am a _____ person"	"This is like me ....."					"Being as I am in this respect is something I ...."					"I would like to be like this ...."				
	Seldom	Occasionally	About half the time	A good deal of the time	Most of the time	Very much dislike	Dislike	Neither like nor dislike	Like	Like Very much	Seldom	Occasionally	About half the time	A good deal of the time	Most of the time
RECKLESS	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
MEDDLESOME	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
ALERT	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
NORMAL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
POISED	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
REASONABLE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
RESPONSIBLE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CONFIDENT	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
SINCERE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
DEMOCRATIC	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CONTROLLED	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
ECONOMICAL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
TACTFUL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
TEACHABLE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
FREE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
WORTHY	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
INDIVIDUALISTIC	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
INTELLECTUAL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
FAULT-FINDING	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

APPENDIX G

SCALE TO MEASURE INTERNAL VERSUS EXTERNAL CONTROL

APPENDIX G

SCALE TO MEASURE INTERNAL VERSUS EXTERNAL CONTROL

PART VIII

INSTRUCTIONS

Read each pair of statements below. Decide whether A or B is closest to your own opinion. Put an "X" in one of the two spaces to show which one is closest to what you believe.

1. A____ Children get into trouble because their parents punish them to much.
   B____ The trouble with most children nowadays is that their parents are too easy with them.

2. A____ Many of the unhappy things in people's lives are partly due to bad luck.
   B____ People's misfortunes result from the mistakes they make.

3. A____ One of the major reasons why we have wars is because people don't take enough interest in politics.
   B____ There will always be wars, no matter how hard people try to prevent them.

4. A____ In the long run people get the respect they deserve in this world.
   B____ Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5. A____ The idea that teachers are unfair to students is nonsense.
   B____ Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. A____ Without the right breaks one cannot be an effective leader.
   B____ Capable people who fail to become leaders have not taken advantage of their opportunities.

7. A____ No matter how hard you try some people just don't like you.
   B____ People who can't get others to like them don't understand how to get along with others.

8. A____ Heredity plays the major role in determining one's personality.
   B____ It is one's experiences in life which determine what they're like.

9. A____ I have often found that what is going to happen will happen.
   B____ Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. A____ In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
    B____ Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. A____ Becoming a success is a matter of hard work, luck has little or nothing to do with it.
    B____ Getting a good job depends mainly on being in the right place at the right time.

12. A____ The average citizen can have an influence in government decisions.
    B____ This world is run by the few people in power, and there is not much the little guy can do about it.

13. A____ When I make plans, I am almost certain that I can make them work.
    B____ It is not always wise to plan too far ahead because many things turn out be a matter of good or bad fortune anyhow.

14. A____ There are certain people who are just no good.
    B____ There is some good in everybody.

15. A____ In my case getting what I want has little or nothing to do with luck.
    B____ Many times we might just as well decide what to do by flipping a coin.

16. A____ Who gets to be the boss often depends on who was lucky enough to be in the right place first.
    B____ Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.

17. A____ As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
    B____ By taking an active part in political and social affairs the people can control world events.

18. A____ Most people don't realize the extent to which their lives are controlled by accidental happenings.
    B____ There really is no such thing as "luck."

19. A____ One should always be willing to admit mistakes.
    B____ It is usually best to cover up one's mistakes.

20. A____ It is hard to know whether or not a person really likes you.
    B____ How many friends you have depends on how nice a person you are.

21. A____ In the long run the bad things that happen to us are balanced by the good ones.
    B____ Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. A____ With enough effort we can wipe out political corruption.
    B____ It is difficult for people to have much control over the things politicians do in office.

23. A____ Sometimes I can't understand how teachers arrive at the grades they give.
    B____ There is a great connection between how hard I study and the grades I get.

24. A____ A good leader expects people to decide for themselves what they should do.
    B____ A good leader makes it clear to everybody what their jobs are.

25. A____ Many times I feel that I have little influence over the things that happen to me.
    B____ It is impossible for me to believe that chance or luck plans an important role in my life.

26. A____ People are lonely because they don't try to be friendly.
    B____ There's not much use in trying too hard to please people, if they like you, they like you.

27. A____ There is too much emphasis on athletics in high school.
    B____ Team sports are an excellent way to build character.

28. A____ What happens to me is my own doing.
    B____ Sometimes I feel that I don't have enough control over the direction my life is taking.

29. A____ Most of the time I can't understand why politicians behave the way they do.
    B____ In the long run the people are responsible for bad government on a national as well as on a local level.

APPENDIX H

PART I

PRETREATMENT VALUE SURVEY

PART I

PRETREATMENT VALUE SURVEY

VALUE SURVEY

PART I

This is a scientific study of value systems. We are conducting this research to better understand and help the patients who enter Pine Rest Christian Hospital.

Thank you for participating in this study.

You will have your first session of questions today. You will be scheduled for two more sessions in about two or three weeks.

For scientific reasons, you will sometimes be asked to answer the same questions more than once. However, we hope that you will find the sessions interesting and learn more about yourself.

There are no right or wrong answers in this study. The best answers are your own ideas and personal opinions.

Please feel free to ask for help while you are working at any time you are unsure about what you are supposed to do.

* * * * * * * * * * * * * * *

You may now turn to page 2. Please read the instructions carefully and begin working.

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.

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	

(Labels for the 18 terminal values were presented here for one-half of the control group and all subjects receiving Treatments 1 and 2.)

(Labels for the 18 instrumental values were presented to the remaining control subjects and all subjects receiving Treatments 3 and 4.)

WHEN YOU HAVE FINISHED, turn this in.
(You will be given Part II.)

APPENDIX I

TREATMENT 1 -- FREEDOM EXERCISE

TREATMENT 1 -- FREEDOM EXERCISE

PART II

COMPARING YOUR VALUES WITH OTHER PEOPLE

Your scores for seven of the values which you arranged are circled below in a way that you will be able to compare them to the scores of others who have come into Pine Rest.

Values	People who place more importance on FREEDOM have these scores:	Average scores:	People who place less importance on FREEDOM have these scores:
FREEDOM	1 to 9	10, 11	12 to 18
	When FREEDOM is more important, these two values are often more important too.		When FREEDOM is less important, these two values are often less important too.
EQUALITY	1 to 12	13, 14	15 to 18
NATIONAL SECURITY	1 to 15	16, 17	18
	When FREEDOM is more important, these four values tend to be less important.		When FREEDOM is less important, these four values tend to be more important.
HAPPINESS	18 to 6	5, 4	3 to 1
SALVATION	18 to 4	3, 2	1
SOCIAL RECOGNITION	18 to 15	14, 13	12 to 1
PLEASURE	18 to 15	14, 13	12 to 1

If your scores tend to fall on this side of the page, you may be like people who place more value on FREEDOM

If your scores tend to fall on this side of the page, you may be like people who place less value on FREEDOM

WHICH GROUP DO YOU THINK YOU ARE MOST LIKE?

(Circle one number)

Almost exactly like the HIGH FREEDOM group			A little bit like the HIGH FREEDOM group			A little bit like the LOW FREEDOM group			Almost exactly like the LOW FREEDOM group	
1	2	3	4	5	6	7	8	9	10	11
		Quite a bit like the HIGH FREEDOM group		I am about average or not sure				Quite a bit like the LOW FREEDOM group		

GO ON TO THE NEXT PAGE

From previous research, we have found some other differences between patients who place FREEDOM high and those who place FREEDOM lower in importance at the time of admission to the hospital.

Patients placing greater importance on FREEDOM	Patients placing less importance on FREEDOM
This group is more likely to indicate more problems on their personality tests.	These patients express fewer problems on personality tests.
Show more dissatisfaction and resentment toward others.	They indicate that they are less anxious or nervous.
Are more easily hurt and quicker to blame others for their problems.	Nurses see them as more cooperative and better at starting and sticking with things.
Are seen by the doctors as having more serious problems.	These patients are more likely to put more importance on FREEDOM by the time they leave the hospital.
After leaving the hospital, they are expected by their therapists as being among those more likely to return.	After being discharged, fewer of these patients are expected by their therapists to require hospitalization in the future.

ONCE AGAIN, INDICATE WHICH GROUP YOU THINK YOU ARE MOST LIKE.

(Circle one number)

Almost exactly like the HIGH FREEDOM group		A little bit like the HIGH FREEDOM group		A little bit like the LOW FREEDOM group		Almost exactly like the LOW FREEDOM group		
1	2	3	4	5	6	7	8	9	10	11
		Quite a bit like the HIGH FREEDOM group		I am about AVERAGE or not sure		Quite a bit like the LOW FREEDOM group		

GO ON TO THE NEXT PAGE

CONCLUSIONS ABOUT FORMER PATIENTS

We believe the meaning and importance people place on FREEDOM affects much of what they feel and do.

Some people come into the hospital who place too much importance on their personal freedom. They may have greater difficulty getting along with others in their life. They may feel that others stand in the way of what they want.

Other people come into the hospital who place too little importance on their freedom. They may go along with what others want too often. They may not put enough importance on what they want.

It is probably worthwhile for people to think about what FREEDOM means to them. And to look at how and when they exercize their freedom.

WHAT DO YOU THINK?

(Circle one number)

I agree completely with the above conclusions		I agree quite a bit		I agree a little	I'm not sure	I disagree a little		I disagree quite a bit	I completely disagree with the conclusions	
1	2	3	4	5	6	7	8	9	10	11

HOW DO YOU FEEL, RIGHT NOW, ABOUT THE WAY YOU HAVE ARRANGED YOUR VALUES?

(Circle one number)

Extremely satisfied		Satisfied quite a bit		A little satisfied	I'm not sure	A little dissatisfied		Dissatisfied quite a bit	Extremely dissatisfied	
1	2	3	4	5	6	7	8	9	10	11

GO ON TO THE NEXT PAGE

APPENDIX J

TREATMENT 2 -- SELF-RESPECT EXERCISE

APPENDIX J

TREATMENT 2 -- SELF-RESPECT EXERCISE

PART II

COMPARING YOUR VALUES WITH OTHER PEOPLE

Your scores for seven of the values which you arranged are circled below in a way that you will be able to compare them to the scores of others who have come into Pine Rest.

Values	People who place more importance on SELF-RESPECT have these scores:	Average scores:	People who place less importance on SELF-RESPECT have these scores:
SELF-RESPECT	1 to 4	5, 6, 7, 8	9 to 18
	When SELF-RESPECT is more important, these two values are often more important too.		When SELF-RESPECT is less important, these two values are often less important too.
SOCIAL RECOGNITION	1 to 12	13, 14	15 to 18
WISDOM	1 to 6	7, 8	9 to 18
	When SELF RESPECT is more important, these four values tend to be less important.		When SELF RESPECT is less important, these four values tend to be more important.
A WORLD OF BEAUTY	18 to 16	15, 14	13 to 1
NATIONAL SECURITY	18 to 17	16	15 to 1
FAMILY SECURITY	18 to 7	6, 5, 4	3 to 1
A WORLD AT PEACE	18 to 14	13, 12	11 to 1

If your scores tend to fall on this side of the page, you may be like people who place more value on SELF-RESPECT.

If your scores tend to fall on this side of the page, you may be like people who place less value on SELF-RESPECT.

WHICH GROUP DO YOU THINK YOU ARE MOST LIKE? (Circle one number)

Almost exactly like the HIGH SELF-RESPECT group		A little bit like the HIGH SELF-RESPECT group		A little bit like the LOW SELF-RESPECT group		Almost exactly like the LOW SELF-RESPECT group	
1	2	3	4	5	6	7	8	9	10	11
		Quite a bit like the HIGH SELF-RESPECT group			I am about AVERAGE or not sure			Quite a bit like the LOW SELF-RESPECT group		

GO ON TO THE NEXT PAGE

From previous research, we have found some other differences between patients who place SELF-RESPECT high and those who place SELF-RESPECT lower in importance at the time of admission.

Patients placing greater importance on SELF-RESPECT	Patients placing less importance on SELF-RESPECT
These patients express fewer problems on personality tests.	These patients more often indicate they are sensitive and easily hurt by what others say.
Nurses see this group as easier to communicate with and making a better adjustment to the hospital.	This group is seen as less cooperative by the nurses.
These patients tend to stay in the hospital somewhat longer.	More likely to be in therapy one year after coming into the hospital.
More likely to be among those showing even more improvement after leaving the hospital.	Their therapists see them as more likely to return to the hospital again some day.

ONCE AGAIN, INDICATE WHICH GROUP YOU THINK YOU ARE MOST LIKE.

(Circle one number)

Almost exactly like the HIGH SELF-RESPECT group			A little bit like the HIGH SELF-RESPECT group			A little bit like the LOW SELF-RESPECT group			Almost exactly like the LOW SELF-RESPECT group	
1	2	3	4	5	6	7	8	9	10	11
		Quite a bit like the HIGH SELF-RESPECT group			I am about AVERAGE or not sure			Quite a bit like the LOW SELF-RESPECT group		

GO ON TO THE NEXT PAGE

CONCLUSIONS ABOUT FORMER PATIENTS

We believe the meaning and importance people place on SELF-RESPECT affects much of what they feel and do.

Some people come into the hospital who place fairly high importance on SELF-RESPECT. They like to be admired by others, but feel it is especially important to approve of themselves. They still seem to get along well with other people.

Other people come into the hospital who place less importance on SELF-RESPECT. They seem to have more difficulties within themselves and with others. They may have more trouble adjusting to the hospital and progressing in therapy.

It is probably worthwhile for people to think about what SELF-RESPECT means to them. And to look at how it may affect the things they do.

WHAT DO YOU THINK?

(Circle one number)

I agree completely with the above conclusions — I agree a little — I disagree a little — I completely disagree with the conclusions

1 2 3 4 5 6 7 8 9 10 11

I agree quite a bit — I'm not sure — I disagree quite a bit

HOW DO YOU FEEL, RIGHT NOW, ABOUT THE WAY YOU HAVE ARRANGED YOUR VALUES?

(Circle one number)

Extremely satisfied — A little satisfied — A little dissatisfied — Extremely dissatisfied

1 2 3 4 5 6 7 8 9 10 11

Satisfied quite a bit — I'm not sure — Dissatisfied quite a bit

GO ON TO THE NEXT PAGE

APPENDIX K

TREATMENT 3 -- RESPONSIBLE EXERCISE

APPENDIX K

TREATMENT 3 -- RESPONSIBLE EXERCISE

PART II

COMPARING YOUR VALUES WITH OTHER PEOPLE

Your scores for seven of the values which you arranged are circled below in a way that you will be able to compare them to the scores of others who have come into Pine Rest.

Values	People who place more importance on RESPONSIBLE have these scores:	Average scores:	People who place less importance on RESPONSIBLE have these scores:
RESPONSIBLE	1 to 6	7	8 to 18
	When RESPONSIBLE is more important, these two values are often more important too.		When RESPONSIBLE is less important, these two values are often less important too.
POLITE	1 to 11	12, 13	14 to 18
AMBITIOUS	1 to 6	7, 8	9 to 18
	When RESPONSIBLE is more important, these four values tend to be less important.		When RESPONSIBLE is less important, these four values tend to be more important.
BROADMINDED	18 to 10	9	8 to 1
LOGICAL	18 to 15	14, 13, 12, 11, 10	9 to 1
LOVING	18 to 5	4, 3	2, 1
FORGIVING	18 to 11	10, 9, 8, 7, 6	5 to 1

If your scores tend to fall on this side of the page, you may be like people who place more value on RESPONSIBLE.

If your scores tend to fall on this side of the page, you may be like people who place less value on RESPONSIBLE.

WHICH GROUP DO YOU THINK YOU ARE MOST LIKE? (Circle one number)

Almost exactly like the HIGH RESPONSIBLE group		Quite a bit like the HIGH group	A little bit like the HIGH RESPONSIBLE group	I am about average or not sure	A little bit like the LOW RESPONSIBLE group	Quite a bit like the LOW group	Almost exactly like the LOW RESPONSIBLE group	
1	2	3	4	5	6	7	8	9	10	11

GO ON TO THE NEXT PAGE

From previous research, we have found some other differences between patients who place RESPONSIBLE high and those who place RESPONSIBLE lower in importance at the time of admission.

Patients placing greater importance on RESPONSIBLE	Patients placing less importance on RESPONSIBLE
These patients tend to be more optomistic and realistic.	These patients tend to express more pessimistic attitudes.
These patients are more organized and persistent.	This group tends to have more complaints of anxiety and nervousness.
They are more likely to show even greater improvement continuing after they leave the hospital.	These individuals tend to feel more depressed.
	More people in this group are likely to be in therapy one year after coming into the hospital.

ONCE AGAIN, INDICATE WHICH GROUP YOU THINK YOU ARE MOST LIKE.

(Circle one number)

Almost exactly like the HIGH RESPONSIBLE group			A little bit like the HIGH RESPONSIBLE group			A little bit like the LOW RESPONSIBLE group			Almost exactly like the LOW RESPONSIBLE group	
1	2	3	4	5	6	7	8	9	10	11
		Quite a bit like the HIGH RESPONSIBLE group			I am about average or not sure			Quite a bit like the LOW RESPONSIBLE group		

GO ON TO THE NEXT PAGE

CONCLUSIONS ABOUT FORMER PATIENTS

We believe the meaning and importance people place on RESPONSIBLE affects much of what they feel and do.

People who come into the hospital placing greater importance on RESPONSIBLE appear to feel better and be more realistic.

Some people may place too much importance on being responsible and find that they may not always be fair to themselves by neglecting things that could be important for them.

Some people place too little importance on being responsible and find it difficult to take charge of their lives.

It is probably worthwhile for people to think about what RESPONSIBLE means to them and how it may affect what they do.

WHAT DO YOU THINK?

(Circle one number)

I agree completely with the above conclusions				I agree a little		I disagree a little			I completely disagree with the conclusions	
1	2	3	4	5	6	7	8	9	10	11
		I agree quite a bit			I'm not sure			I disagree quite a bit		

HOW DO YOU FEEL, RIGHT NOW, ABOUT THE WAY YOU HAVE ARRANGED YOUR VALUES?

(Circle one number)

Extremely satisfied				A little satisfied		A little dissatisfied			Extremely dissatisfied	
1	2	3	4	5	6	7	8	9	10	11
		Satisfied quite a bit			I'm not sure			Dissatisfied quite a bit		

GO ON TO THE NEXT PAGE

APPENDIX L

TREATMENT 4 -- SELF-CONTROLLED EXERCISE

APPENDIX L

TREATMENT 4 -- SELF-CONTROLLED EXERCISE

PART II

COMPARING YOUR VALUES WITH OTHER PEOPLE

Your scores for seven of the values which you arranged are circled below in a way that you will be able to compare them to the scores of others who have come into Pine Rest.

Values	People who place more importance on SELF-CONTROLLED have these scores:	Average scores:	People who place less importance on SELF-CONTROLLED have these scores:
SELF-CONTROLLED	1 to 6	7, 8, 9, 10	11 to 18
	When SELF-CONTROLLED is more important, these two values are often more important too.		When SELF-CONTROLLED is less important, these two values are often less important too.
LOGICAL	1 to 9	10, 11, 12, 13, 14	15 to 18
INDEPENDENT	1 to 6	7, 8, 9, 10, 11, 12	13 to 18
	When SELF-CONTROLLED is more important, these four values tend to be less important.		When SELF-CONTROLLED is less important, these four values tend to be more important.
LOVING	18 to 5	4, 3	2, 1
HONEST	18 to 5	4, 3, 2	1
AMBITIOUS	18 to 9	8, 7	6 to 1
CAPABLE	18 to 11	10, 9, 8	7 to 1

If your scores tend to fall on this side of the page, you may be like people who place more value on SELF-CONTROLLED.

*

If your scores tend to fall on this side of the page, you may be like people who place less value on SELF-CONTROLLED.

WHICH GROUP DO YOU THINK YOU ARE MOST LIKE? (Circle one number)

Almost exactly like the HIGH SELF-CONTROLLED group		A little bit like the HIGH SELF-CONTROLLED group		A little bit like the LOW SELF-CONTROLLED group		Almost exactly like the LOW SELF-CONTROLLED group				
1	2	3	4	5	6	7	8	9	10	11
		Quite a bit like the HIGH group			I am about average or not sure			Quite a bit like the LOW group		

GO ON TO THE NEXT PAGE

From previous research, we have found some other differences between patients who place SELF-CONTROLLED high and those who place SELF-CONTROLLED lower in importance at the time of admission.

Patients placing greater importance on SELF-CONTROLLED	Patients placing less importance on SELF-CONTROLLED
These patients say they feel more energetic, restless, and impatient.	These patients tend to be more open to what others say
More of this group are seen by the doctors as having more serious problems.	These patients are more willing to talk about themselves.
Nurses see more of these patients as being overactive, "on the go" and impulsive.	They tend to be more patient.
More of these patients have a longer stay in the hospital.	These patients tend to have a shorter stay in the hospital.
	Many of these patients place more importance on self-controlled as they improve in the hospital.

ONCE AGAIN, INDICATE WHICH GROUP YOU THINK YOU ARE MOST LIKE

(Circle one number)

Almost exactly like the HIGH SELF-CONTROLLED group			A little bit like the HIGH SELF-CONTROLLED group		A little bit like the LOW SELF-CONTROLLED group			Almost exactly like the LOW SELF-CONTROLLED group	
1	2	3	4	5	6	7	8	9	10	11
		Quite a bit like the HIGH SELF-CONTROLLED group			I am about AVERAGE or not sure			Quite a bit like the LOW SELF-CONTROLLED group		

GO ON TO THE NEXT PAGE

CONCLUSIONS ABOUT FORMER PATIENTS

We believe the meaning and importance people place on SELF-CONTROLLED affects much of what they feel and do.

Some people come into the hospital placing great importance on SELF-CONTROLLED. They are often among those who also are having the most trouble controlling their actions. For these people, self-control may be important because it is so difficult.

Others come into the hospital who place rather low importance on SELF-CONTROLLED. Many of these people find that it is worthwhile to place more value on SELF-CONTROLLED in order to manage their lives better.

It is probably worthwhile for people to think about what SELF-CONTROLLED means to them. And to look at how it may affect what they do.

WHAT DO YOU THINK?

(Circle one number)

I agree completely with the above conclusions				I agree a little		I disagree a little			I completely disagree with the conclusions	
1	2	3	4	5	6	7	8	9	10	11
		I agree quite a bit			I'm not sure			I disagree quite a bit		

HOW DO YOU FEEL, RIGHT NOW, ABOUT THE WAY YOU HAVE ARRANGED YOUR VALUES?

(Circle one number)

Extremely satisfied				A little satisfied		A little dissatisfied			Extremely dissatisfied	
1	2	3	4	5	6	7	8	9	10	11
		Satisfied quite a bit			I'm not sure			Dissatisfied quite a bit		

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APPENDIX M

TREATMENT 5 -- NON-TARGETED EXERCISE

APPENDIX M

TREATMENT 5 -- NON-TARGETED EXERCISE

PART II

SOME CONCLUSIONS ABOUT VALUES

We believe that a person's values will affect how he views things and feels about things.

A person's values are his basis for making decisions and determine what he does in many situations.

We believe that when people change, their values change in some important ways too.

It is worthwhile for people to know what values are important to them and to understand how these values affect their lives.

WHAT DO YOU THINK?

(Circle one number)

I agree completely with the above conclusions				I agree a little		I disagree a little				I completely disagree with the conclusions
1	2	3	4	5	6	7	8	9	10	11
		I agree quite a bit			I'm not sure			I disagree quite a bit		

HOW DO YOU FEEL, RIGHT NOW, ABOUT THE WAY YOU HAVE ARRANGED YOUR VALUES?

(Circle one number)

Extremely satisfied				A little satisfied		A little dissatisfied				Extremely dissatisfied
1	2	3	4	5	6	7	8	9	10	11
		Satisfied quite a bit			I'm not sure			Dissatisfied quite a bit		

GO ON TO THE NEXT PAGE

APPENDIX N

FINAL PAGE OF PART II FOR ALL SUBJECTS

APPENDIX N

FINAL PAGE OF PART II FOR ALL SUBJECTS

We would now like to find out what you think about this way of learning about your values.

DID YOU FIND IT INTERESTING OR THOUGHT-PROVOKING?

1	2	3	4	5	6	7	8	9	10	11
Extremely interesting and thought-provoking			A little interesting			A little boring			Extremely boring	

DO YOU FEEL YOU LEARNED SOMETHING ABOUT YOUR VALUES?

1	2	3	4	5	6	7	8	9	10	11
Yes, I learned a lot		Quite a bit			A few things		Not much		No, I did not learn anything	

DO MOST OF THE THINGS YOU DO MATCH THE WAY YOU ARRANGED YOUR VALUES?

1	2	3	4	5	6	7	8	9	10	11
Everything I do is consistent with the way I arranged my values			I usually act according to the way I arranged my values			Quite often my actions do not match the way I arranged my values		Nothing I do fits or is consistent with the way I arranged my values		

THIS IS THE END OF PART II.

WHEN YOU ARE FINISHED, TURN THIS PART IN
AND YOU WILL BE GIVEN PART III.

APPENDIX O

PART III

VALUE SURVEY AT TIME I

APPENDIX O

PART III: VALUE SURVEY AT TIME I

PART III

On this page are 18 more values listed in alphabetical order.
ARRANGE THESE VALUES in order of importance to YOU, as guiding principles in your life.

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	

(Labels were presented here for the set of values the subject had not ranked initially.)

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE.

Here are the 18 values which you arranged earlier. Please ARRANGE THEM AGAIN in order of their importance to you RIGHT AT THIS TIME.

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	

(Labels were presented here for the same set of values ranked by the subject prior to treatment.)

When you have finished, turn in this part. This will complete today's test session. We will let you know when to come in for the second session.

THANK YOU !

APPENDIX P

F RATIOS FOR ALL SOURCES OF VARIANCE IN ALL OMNIBUS TESTS PERFORMED (TABLE P-1 THROUGH P-11)

TABLE P-1 -- F RATIOS FOR SOURCES OF VARIANCE IN THE REPEATED MEASURES ANOVAS OF TARGET VALUE RANKS

		Target Value							
		Freedom		Self-Respect		Responsible		Self-Controlled	
Source	df*	F	P	F	P	F	P	F	P
TR (Treatment)	4	.891	.472	.763	.551	2.538	.044	.263	.901
SX (Sex)	1	2.486	.118	6.933	.009	.191	.662	.207	.649
DX (Diagnosis)	1	.343	.559	5.413	.022	8.268	.005	.023	.879
TM (Time)	1	1.607	.207	7.494	.007	.007	.930	4.145	.044
TR by TM	4	.798	.529	1.235	.300	.878	.479	.532	.711
TR by SX	4	.949	.439	.840	.503	.447	.774	1.933	.110
TR by DX	4	3.495	.010	1.772	.140	.959	.433	.424	.790
TM by SX	1	.085	.770	.001	.983	.372	.543	.031	.859
TM by DX	1	1.707	.194	3.356	.070	1.206	.274	.412	.522
SX by DX	1	5.320	.023	.326	.569	.836	.362	.507	.478
TR by SX by DX	4	.116	.976	.552	.697	.847	.498	1.070	.375
TR by TM by SX	4	1.193	.318	1.670	.162	.754	.557	.243	.913
TR by TM by DX	4	.693	.598	.312	.868	2.148	.080	.850	.496
TM by SX by DX	1	3.290	.072	.122	.727	2.516	.115	.995	.321
TR by TM by SX by DX	4	1.149	.337	1.869	.121	.666	.616	1.045	.388

* df error = 100

TABLE P-2 -- F RATIOS FOR SOURCES OF VARIANCE IN THE REPEATED MEASURES ANOVAS OF TARGET VALUE DEVIATION SCORES (LEVINE'S TEST)

		Target Value							
		Freedom		Self-Respect		Responsible		Self-Controlled	
Source	df*	F	P	F	P	F	P	F	P
TR (Treatment)	4	1.018	.401	3.033	.020	1.486	.212	2.573	.042
SX (Sex)	1	.001	.970	3.381	.068	.218	.641	2.947	.089
DX (Diagnosis)	1	.020	.887	13.202	.000	.172	.678	.038	.844
TM (Time)	1	.010	.918	2.634	.107	1.061	.305	1.015	.316
TR by TM	4	1.120	.351	1.512	.204	1.472	.216	.934	.447
TR by SX	4	.430	.786	.719	.580	1.523	.201	.466	.760
TR by DX	4	1.005	.408	2.331	.061	.552	.697	.428	.787
TM by SX	1	2.970	.087	5.334	.023	.188	.664	3.782	.054
TM by DX	1	.407	.524	7.657	.006	.053	.816	.541	.453
SX by DX	1	.138	.710	2.094	.151	1.503	.223	.042	.836
TR by SX by DX	4	.600	.663	.792	.532	.664	.618	.841	.502
TR by TM by SX	4	.649	.628	3.050	.020	2.031	.095	.335	.853
TR by TM by DX	4	2.194	.075	1.422	.232	1.033	.394	1.179	.324
TM by SX by DX	1	.324	.570	.542	.463	4.932	.028	.649	.422
TR by TM by SX by DX	4	1.152	.336	1.587	.183	.370	.829	.288	.884

* df error = 100

TABLE P-3 -- F RATIOS FOR SOURCES OF VARIANCE IN THE MULTIVARIATE ANOVA OF THE THREE INDIRECT MEASURES OF FREEDOM

Source	df	F	P
TR (Treatment)	12,259.575	1.180	.297
SX (Sex)	3,98	.587	.624
DX (Diagnosis)	3,98	6.410	.001
TR by SX	12,259.575	1.568	.100
TR by DX	12,259.575	.851	.597
SX by DX	3,98	.731	.535
TR by SX by DX	12,259.5751	1.489	.128

TABLE P-4 -- F RATIOS FOR SOURCES OF VARIANCE IN THE UNIVARIATE ANOVAS OF THE THREE INDIRECT MEASURES OF FREEDOM

		Dependent Variables					
		Independence (VP)		Acceptance of Authority		Independence (SIV)	
Source	df*	F	P	F	P	F	P
TR (Treatment)	4	.923	.453	.863	.488	2.011	.098
SX (Sex)	1	1.121	.292	.892	.347	.001	.975
DX (Diagnosis)	1	.266	.607	19.232	.001	.286	.594
TR by SX	4	1.761	.142	2.382	.056	1.114	.354
TR by DX	4	.069	.991	1.371	.246	1.199	.316
SX by DX	1	.018	.892	.050	.822	2.186	.142
TR by SX by DX	4	1.742	.142	1.071	.375	1.370	.249

* df error = 100

TABLE P-5 -- F RATIOS FOR SOURCES OF VARIANCE IN THE MULTIVARIATE ANOVA OF THE PAIR OF INDIRECT MEASURES OF SELF-RESPECT

Source	df	F	P
TR (Treatment)	8,198	1.592	.129
SX (Sex)	2,99	1.032	.359
DX (Diagnosis)	2,99	2.260	.109
TR by SX	8,198	.487	.864
TR by DX	8,198	.408	.914
SX by DX	2,99	1.291	.279
TR by SX by DX	8,198	1.562	.137

TABLE P-6 -- F RATIOS FOR SOURCES OF VARIANCE IN THE UNIVARIATE ANOVAS OF THE TWO INDIRECT MEASURES OF SELF-RESPECT

		Dependent Variables			
		Individualism		Leadership	
Source	df*	F	P	F	P
TR (Treatment)	4	2.164	.078	1.380	.246
SX (Sex)	1	.202	.654	1.692	.196
DX (Diagnosis)	1	4.478	.036	.001	.987
TR by SX	4	.341	.849	.611	.655
TR by DX	4	.286	.886	.497	.737
SX by DX	1	.672	.414	1.613	.207
TR by SX by DX	4	1.395	.241	1.521	.201

* df error = 100

TABLE P-7 -- F RATIOS FOR SOURCES OF VARIANCE IN THE MULTIVARIATE ANOVA OF THE PAIR OF INDIRECT MEASURES OF RESPONSIBLE

Source	df	F	P
TR (Treatment)	8,198	.479	.869
SX (Sex)	2,99	1.275	.283
DX (Diagnosis)	2,99	2.770	.067
TR by SX	8,198	1.178	.313
TR by DX	8,198	.605	.772
SX by DX	2,99	3.485	.034
TR by SX by DX	8,198	1.066	.388

TABLE P-8 -- F RATIOS FOR SOURCES OF VARIANCE IN THE UNIVARIATE ANOVAS OF THE TWO INDIRECT MEASURES OF RESPONSIBLE

		Dependent Variables			
		Social Responsibility		Conformity	
Source	df*	F	P	F	P
TR (Treatment)	4	.532	.712	.443	.777
SX (Sex)	1	2.476	.118	.079	.778
DX (Diagnosis)	1	.002	.964	5.596	.020
TR by SX	4	1.434	.228	.958	.434
TR by DX	4	.834	.506	.407	.803
SX by DX	1	5.467	.021	1.452	.231
TR by SX by DX	4	1.781	.138	.392	.813

* df error = 100

TABLE P-9 -- F RATIOS FOR SOURCES OF VARIANCE IN THE MULTIVARIATE ANOVA OF THE PAIR OF INDIRECT MEASURES OF SELF-CONTROLLED

Source	df	F	P
TR (Treatment)	8,198	.723	.670
SX (Sex)	2,99	.017	.983
DX (Diagnosis)	2,99	.367	.693
TR by SX	8,198	.987	.446
TR by DX	8,198	.282	.971
SX by DX	2,99	.513	.599
TR by SX by DX	8,198	1.096	.367

TABLE P-10 -- F RATIOS FOR SOURCES OF VARIANCE IN THE UNIVARIATE ANOVAS OF THE TWO INDIRECT MEASURES OF SELF-CONTROLLED

		Dependent Variables			
		Self-Control		Value-Determined Restraint	
Source	df*	F	P	F	P
TR (Treatment)	4	.457	.766	1.160	.333
SX (Sex)	1	.000	1.000	.033	.855
DX (Diagnosis)	1	.011	.916	.741	.391
TR by SX	4	1.126	.348	1.035	.393
TR by DX	4	.126	.972	.378	.823
SX by DX	1	.716	.399	.496	.482
TR by SX by DX	4	.587	.672	1.657	.166

* df error = 100

TABLE P-11 -- F RATIOS FOR SOURCES OF VARIANCE IN THE MULTIVARIATE AND UNIVARIATE ANOVAS OF THE SET OF FOUR SELF-REGARD MEASURES

	Multivariate			Univariate							
				Dependent Variables							
				Self-Acceptance		Self-Satisfaction		Self-Esteem		Locus of Control	
Source	df	F	P	df*	F	P	F	P	F	P	F	P
TR (Treatment)	16,296.977	.642	.848	4	1.105	.358	.769	.547	.246	.911	.427	.788
SX (Sex)	4,97	.611	.655	1	1.700	.195	.375	.541	.010	.917	.151	.697
DX (Diagnosis)	4,97	2.906	.025	1	7.948	.005	2.939	.089	1.550	.216	1.687	.196
TR by SX	16,296.977	1.022	.432	4	.466	.760	.764	.551	1.040	.390	1.203	.314
TR by DX	16,296.977	.468	.960	4	1.029	.395	.907	.462	1.018	.401	.078	.988
SX by DX	4,97	.870	.484	1	.360	.549	.098	.754	.527	.469	1.802	.182
TR by SX by DX	16,296.977	.587	.893	4	.356	.839	.259	.903	.955	.624	1.067	.376

* df error = 100