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PERSONALITY CHARACTERISTICS ASSOCIATED WITH EFFECTIVENESS IN PSYCHOTHERAPY

by

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INTRODUCTION

Review of the Literature

The purpose of this research is to establish construct validity for an empirically derived indicator of therapeutic effectiveness. An attempt will be made to determine relationships between this scale and other measures of personality thought to be important to therapeutic effectiveness.

The need for this research has occurred because of changes in the views of the therapist's contribution to treatment results. Freud, viewed the therapist as a blank screen upon which the patient projected "transference images". The therapist himself was not viewed as an influence in the process; at most any intrusion of his personal attributes was considered a source of error. The therapist's effectiveness was thought to be solely dependent on his technical operations (Freud, 1910, 1937).

This view has changed and writers such as Alexander (1958), Fromm-Reichmann (1950), Glover (1955), Rogers (1951, 1961), Snyder (1959), Strupp (1958), Bugental (1964) and Wolstein (1959) have given impetus to the development of a different model of the therapist's role in the treatment process. The current view is that the personality characteristics of the psychotherapist may assume a critical role in the outcome of treatment. If the personality characteristics

accounting for the greatest variance with respect to outcome can be isolated, therapists might be trained to maximize personal potential related to successful outcome and minimize the influence of less favorable characteristics (Rogers, 1957; Strupp, 1958).

There has been a continuing search during the past several years for relationships between the personal qualities of therapists and the nature and outcome of their treatment effects. It has been demonstrated that the course of psychotherapy is significantly affected by the therapist's initial evaluative attitudes toward his patient (Affleck and Garfield, 1961; Eels, 1964; VanderVeen and Sloler, 1965; Strupp, 1960; Wallach and Strupp, 1960), similarity in perceptions of the client and therapist (Cannon, 1964), experience in eliciting and approaching dependency responses (Caracena, 1965), experience and theoretical viewpoint (Sundland and Barker, 1962), acceptance and empathic understanding of patients (Cartwright and Lerner, 1963; Lorr, 1965; Truax and Carkhuff, 1965), the lexical and tonal quality of the therapist's language (Rice, 1965), the therapist's psycho-social characteristics (McIver and Redlich, 1959), and therapist-patient value similarity (Gladd, 1959; Parloff, Ifflund and Goldstein, 1960).

While there has been a growing interest in the contribution of the personality of the therapist to the psychotherapeutic process, systematic investigation has been hindered

by the lack of an objective personality measure shown to be specifically related to therapeutic effectiveness (Strupp, 1962). The availability of such a measure might provide the researcher with a means by which he could investigate the effect of the relevant variables in settings other than the professional one. This would of course avoid many of the problems involved in exploratory research in the actual psychotherapy situation.

Development of a Scale of Therapeutic Effectiveness

Whitehorn and Betz (1954, 1960; Betz and Whitehorn, 1956) have made perhaps the most extensive investigations into the relationships between therapist personality variables and the treatment of hospitalized schizophrenic patients. Their work was carried out at the Henry Phipps Clinic, Johns Hopkins University. In the course of their research they discovered that psychotherapists had quite different rates of success with their schizophrenic patients. One group of therapists, which the authors called A therapists, achieved an improvement rate above 68 per cent (approximate average of 75 per cent) while the other group, the B group, achieved an improvement rate that was 68 per cent or less (approximate average of 30 per cent). The authors attempted to control relevant variables including experience, effectiveness with patients in other diagnostic categories, diagnostic subclass of schizophrenics treated, and clinical diagnosis of treated

patients. They concluded that their findings were due to differences between the therapists themselves and that these differences were in the therapists' personalities.

A search was then made for variables thought to be important to the therapeutic process and a variable was located which systematically differentiated between the two groups of therapists (Betz 1963, Whitehorn, 1960, Whitehorn and Betz, 1960). It was found that A and B therapists differed on their respective Strong Vocational Interest Blank profiles. A therapists scored high on the Lawyer and Certified Public Accountant scales relative to B therapists and low on the Mathematics-Physical Science Teacher and Printer Scales. B therapists scored low on the first two scales relative to A therapists and high on the latter two. The differences were significant at the .10 and .02 level by the chi square test.

Using these scales a screen was devised from the Strong test scores of 26 physicians on whom the original studies were based. Predictive accuracy of the screen was tested on another group of 24 physicians. Using the screening device, predictions were made as to whether they would achieve improvement rates of 68 per cent or more with their schizophrenic patients, A predictions turned out to be 80 per cent correct and the B predictions 70 per cent correct. Specifically, only 2 out of 10 therapists predicted to meet the A criterion failed to do so, and 7 out of 10 predicted to fall below the criterion did so.

In an attempt to explore further the characterization of the personal qualities of A and B therapists, responses to each of the 400 Strong items were examined. Twenty-three items were found to which A and B therapists gave contrasting responses at levels of statistical significance of between .02 and .05 by the chi square test. Another screen was devised using these items. With a second set of therapists it was found that the upper part of the screen performed with 83 per cent accuracy in identifying A therapists. Out of 12 therapists predicted to meet the A criterion only two failed to do so. Seven out of nine therapists predicted to fall below the criterion did so. In cross validation studies,

A-B Scale and in the second cross-validation, eight of nine therapists were correctly identified by the scale.

Subsequently, there was a five-year follow-up study of 155 patients treated by the original A and B therapists. Betz (1963) reports that 60 per cent of 131 patients who had been discharged as improved required no further psychiatric hospitalization during the five-year period, while this was true for only 15 per cent of the 74 patients who had been discharged "unimproved". Apparently the clinical criteria of "improvement" in the earlier studies had some validity, and the results provide added support for the clinical significance of the research.

The SVIB A-B Scale has been used infrequently, primarily for three reasons: (1) brevity of the scale casts doubt on its statistical reliability, (2) suitable subjects and criteria have been difficult to locate, and (3) the construct validity of the scale is uncertain. An attempt has been made to lengthen the scale by the addition of items from the MMPI which have been shown to correlate highly with total A-B scores (Kemp 1963). However, the scale was not brought up to date for use with the 1966 revision of the SVIB and addition of the MMPI items may result in a psychometrically more defensible scale but has not done much to demonstrate construct validity.

Due to difficulties in securing suitable subjects and criteria, further studies have been limited to "naive" subjects (i.e., undergraduate students from introductory psychology courses). The criterion problem has been dealt with by using some performance in an analogue type of study as the dependent variable (Shows and Carson 1965, Carson, Harden and Shows, 1964, Kemp 1963). The only reported attempt to study the original sample of subjects or similar subjects was a study of the individual modes of spatial orientation of 30 high and low A-B therapists who had been studied by Whitehorn and Betz (Pollack and Kiev, 1965). While these studies may have contributed to the search for construct validity, their results are at best tenuous until replicated in more realistic situations.

Campbell, Stephens, Uhlenhuth and Johansson (1967) have revised the original A-B Scale for use with the 1966 revision of the SVIB, using the original sample of therapists as subjects. Using the original criterion groups of A and B therapist - 72 members of the Psychiatric resident staff of the Henry Phipps Psychiatric Clinic who had treated at least four schizophrenic patients - an expanded scale was constructed. To build the revised A-B Scale the responses of the A and B therapists to individual SVIB items were compared. The Scale was expanded to 80 items using rules for item weighting developed in earlier research (Campbell, 1966).

The same study contributed some information valuable for the establishment of construct validity of the scale. When occupational groups were ranked on the Scale, verbally oriented occupations (e.g., author-journalist, lawyer and librarian) scored high, as did artists, advertising men and ministers. The most extreme groups on the low end were carpenters, pilots, veterinarians, farmers, math-science teachers, and business education teachers - all occupations characterized by a practical, straight-forward, non-intellectual approach to problems. In the same study, longitudinal data from entering freshmen classes at several medical schools were used to establish test-retest correlations for the A-B Scale. Over a five-year period test-retest correlations were moderately high in all schools (median = .64).

Construct Validity

With the development and use of various testing devices there has been a recurring plea by psychologists for the development of construct validity as the foundation upon which any instrument designed either for experimental or practical use can be based. According to English and English (1958, p. 116)

> A hypothetical construct refers to an entity or process that is inferred as actually existing (though not at present fully observable) and as giving rise to measurable phenomena, including phenomena other than the observables that led to hypothesizing the construct. The hypothetical construct is said to have 'surplus meaning'. Thus, an attitude inferred from the behavior of stating one's preferences on an attitude questionnaire is conceived as having certain other, predictable consequences.

According to the Standards for Educational and Psychological Tests and Manuals (1966, p. 13)

> Construct validity is evaluated by investigating what qualities a test measures, that is, by determining the degree to which certain explanatory concepts or constructs account for performance on the test . . . Construct validity is ordinarily studied when the tester wishes to increase his understanding of the psychological qualities being measured by the test. . . . Construct validity is relevant when the tester accepts no existing measure as a definitive criterion of the quality with which he is concerned or when a test will be used in so many diverse decisions that no single criterion applies. Here the traits or qualities underlying test performance are of central importance.

Other writers have also stated the necessity for the establishment of construct validity. Cronbach and Meehl (1955) state that the problem faced by the investigator is "what constructs account for variance in test performance". These authors furthermore argue against Anastasi's (1948) easy dismissal of the investigation of elusive psychological processes underlying test performance. They argue that the development of construct validity should be based on an attempt to formulate and clarify constructs which are evidenced by performance but distinct from it. "An inductive inference based on a pattern of correlations cannot be dismissed as pure speculation" (Cronbach and Meehl, 1955). The authors feel that construct validation takes place when an investigator believes that his instrument reflects a particular construct to which are attached certain meanings. The fundamental principle involved is the development of a "nomological network". The laws in a nomological network may relate (a) observable properties or quantities to each other, (b) theoretical constructs to observables, or (c) different theoretical constructs to one another. These may be statistical or deterministic. Furthermore for a construct "to be scientifically admissible it must occur in a nomological network, at least some of whose laws involve observables". To retain scientific admissibility, Cronbach and Meehl insist that "unless (the nomological) network makes contact with observations and exhibits explicit, public steps of inference,

construct validation cannot be claimed". A rigorous (though probabilistic) chain of inference is required to establish a test as a measure of a construct. Cronbach and Meehl allow for the difficult process of building a construct by pointing out that in the early stages of development of a construct little or no theory in the usual sense of the word need be involved. Hypothesized laws may be formulated entirely in terms of descriptive dimensions although not all of the relevant observations have been made. Predictions may be made which are erroneous but which then result in the modification of the construct. The important emphasis is upon building a network however loose it may be, recognizing that the incomplete knowledge of the laws of nature may produce vagueness in our constructs.

Campbell (1960, p. 547) has identified two types of construct validity: trait validity and nomological validity. Trait validity he believes to be the most immediately accessible at this stage of test development, but the ultimate validity level to be reached is the nomological level. He interprets nomological validity

> to be represented by the important novel emphasis of Cronbach and Meehl on the possibility of validating tests by using scores from a test of interpretations of a certain term in a formal theoretical network and through this to generate predictions which would be validating if confirmed when interpreted as still other operations and scores.

At this point it would be useful to introduce McCorquodale and Meehl's (1948, p. 107) distinction between intervening variables and hypothetical constructs. They point out that there is a difference between constructs which merely abstract the empirical relationships and those constructs which are "hypothetical", i.e., involve the supposition of entities or processes not among the observed. Intervening variables take a place in scientific investigation which is intermediate between the ultimate goal of hypothetical construct development and observation of data upon which the construct is ultimately built.

> Concepts which can be called intervening variables are identified by three characteristics: (1) The statement of such a concept does not contain any words which are not reducible to the empirical laws, (2) the validity of the empirical laws is both necessary and sufficient for the correctness of the statements about the concept, and (3) the quantitative expression of the concept can be obtained without mediate inference by suitable groups of terms in the quantitative empirical laws. On the other hand the formulation of hypothetical constructs: (1) involve words not wholly reducible to the words in the empirical laws, (2) the validity of the empirical laws is not a sufficient condition for the truth of a concept since it contains surplus meaning, and (3) quantitative forms of the concept is not obtainable simply by grouping empirical terms and functions.

Essentially intervening variables are a convenience while hypothetical constructs have, in addition to the empirical data which constitute their support, the requirement that their existence should be compatible with general

knowledge and particularly with whatever relevant knowledge exists at the next lower level in the explanatory heirarchy. As Campbell (1960) points out, the effort to establish construct validity does not represent the abandonment of operationalism. Construct validity represents the highest level of scientific formulation covering areas not immediately accessible to investigation, but based upon the intermediate steps of intervening variables.

Development of a Construct

The construct to be developed in this study is that of "successful therapist". The information on which this construct is to be based has come from three major sources: Whitehorn and Betz (1954, 1957, 1960) Holt and Luborsky (1962), and Fox (1963).

The work of Whitehorn and Betz has been reviewed earlier. In addition to their discovery of differences on an empirical basis - i.e., item responses on the SVIB - successful and less successful therapists were characterized as differentiated by personality and behavioral characteristics in their work with their respective groups of patients. The A therapists were described as being "capable of some grasp of the personal meaning and motivation of the patient's behavior, going beyond mere clinical description and narrative biography". A therapists in their day-to-day tactics were able to participate actively rather than set a pattern of

passive permissiveness, interpretation and instruction. B therapists tended to be passively permissive or to point out to a patient his mistakes and misunderstandings and to interpret his behavior in an instructional style. A therapists did little of this, but expressed personal attitudes more freely on problems being talked about and set limits on the kind and degree of obnoxious behavior permitted. They were able to perceive the patient's behavior in terms of meanings and motivations which resulted in shared intelligibility and seemed to reduce the patient's alienation, with improved capacity for social self-assertion and an attentuation of clinical "schizophrenia". A therapists were characterized as having a capacity to be perceptive of the individualistic inner experiences of the patients while themselves functioning in responsibly individualistic roles. The solutions to the patient's problems were worked out through collaborative exploration of possibilities rather than in the model of authoritative instruction. The B therapists were characterized as emphasizing value systems weighted toward deference and conformity to the way things are. Their mechanically inclined interests and orientation toward precision and rule-of-thumb approach was hypothesized as constituting an actual hindrance to the development of self-trust and social spontaneity.

Another source of information on which to base a concept of successful therapists are studies using supervisor ratings

as the criterion of success. Fox (1963) reported an assessment of therapists on the California Psychological Inventory. Therapists rated high by supervisors were characterized as more self-confident, outgoing, aggressive people, while less competent therapists were more retiring, passive and other-directed. The highs were individualistic, nonconforming and spontaneous, although they remained within the limits of acceptable social behavior. The lows were more concerned with being dependable, traditional and preserving the status quo. The highs were introspective and empathic persons who could admit to personal deficiencies without loss of self-esteem. The lows were not prone to introspection and had little tolerance for indications of shortcomings in other people or in the established social order. The highs were more open and consistent in their relationship to authority figures and tended toward inner rather than external conformity. The lows stressed outward conformity and were characterized by a more rigid and punitive superego.

In a study of therapists selected for training at the Menninger Foundation (Holt and Luborsky, 1962), a group rated by supervisors as functioning most effectively was differentiated from a group rated as functioning least effectively. The highs were characterized as more intelligent, sensitive and independent in thinking and judgment. The high group could be warmer but also more self-contained and even-tempered and they expressed themselves more appropriately. Their

relationships with patients and others with whom they worked were better; in fact peer ratings were almost equivalent to supervisor ratings in predicting their status.

Characteristics of Therapists

For the sake of convenience, characteristics of therapists may be separated into three main areas; intellectual, interests, and personality. There is no evidence to support these divisions as mutually exclusive, and in fact there is reason to believe considerable overlap exists but for the purpose of further study there seems to be some value in discussing therapists' characteristics in terms of these areas.

Intellectual

Intellectually, more successful therapists are expected to be more intelligent than less successful therapists. Holt and Luborsky (1962) support this view in their study of the personality characteristics of therapists at the Menninger Foundation. While it is not expected that intelligence alone is the primary factor responsible for successful psychotherapy, it might be expected that when other factors are held constant more intelligent people usually do a better job in intellectually demanding activities. Briefly, the more intellectual ability an individual has, the better he is expected to perform in the task of psychotherapy.

Interests

In the area of interests, successful therapists would be expected to have high interests in theory and ideas, people, cultural activities, creative and complex activities, and literary and artistic activities. Less successful therapists would be expected to have higher interests in more practical activities, things, money, objects, religion, simplicity, business and mechanical activities. Campbell et al. (1967) support this expectation with the rankings of occupational groups on the A-B Scale.

On the basis of the evidence cited earlier, it is possible to describe certain characteristics that could be assumed to differentiate between more and less successful therapists. It would seem that the human personality is a complex entity and the interest patterns of more successful therapists would enable them to understand and work with this complexity. The words or behaviors of the patient can be viewed as abstractions which the therapist must be able to utilize to build up an underlying model of the patient as a unique human being. This model would serve as a guide to the therapist in making either implicit or explicit predictions about the patient and as the basis for making his decisions about how he will react to the patient's words and behaviors. It can be hypothesized that the more successful therapist is able to construct and work with a more complex model as well as to be able to more easily revise his model when he receives

information which is discrepant with the model. In deciding upon his actions and reactions to this model he is able to be more flexible, more creative and "artistic" in his choices. The less successful therapist might be expected to build a less complex model of the patient and to be less able to make revisions upon receiving discrepant information. He would be far more limited in his choices of actions and reactions of the model he has built up and would prefer using simple "rule of thumb" techniques than trying approaches whose consequences he cannot immediately foresee.

Previous research suggests that the successful therapist must be able to put his understandings of the individual with whom he is working into words. He deals in a verbal medium and he must be skillful at verbal expression and communication. This does not ignore the occurrence of non-verbal kinds of communication between the therapist and the patient, but one of the goals of therapy is to enable the patient to express himself through the medium of words so as to make himself more understandable to other people. The more successful therapist, then, would be expected to have high interests in verbal areas, both in terms of making use of words to gain understanding and knowledge and also to express and explain.

Less successful therapists would be less likely to be able to tolerate and enjoy ambiguity. It would be expected that they would feel more comfortable functioning in an

orderly and highly structured world. Religion imposes a structure and order upon the world, objects are concrete and unambiguous, money is a source of security and structured success in an uncertain world. While pilots, farmers and veterenarians may be to some degree at the mercy of the uncertainties of nature they function in an uncertain world in a practical, straightforward manner. The medium with which they work is not words but practical straightforward action designed to achieve a specific, preconceived unambiguous goal. The math-science and business education teachers, while using words to some extent, have clear goals to achieve and clear procedures for achieving these goals. Problems may be solved, but there are clear black or white answers to problems and clearly specified procedures for solving problems.

The less successful therapist would prefer clear answers to problems, feel more comfortable in providing clinical description and narrative biography about patients, and specify clearly to the patient his mistakes as though there were a right and a wrong way of doing things. In short, the less successful therapist prefers a conformity to widely accepted beliefs about the way things should be, and to take no chances but behaves in a manner most likely to be approved by society as he perceives it. To perceive the world as simple and uncomplex is to eliminate a source of insecurity. The therapist can feel more secure behaving as though the world

and people are simple and uncomplex and the requirements for living are likewise simple and uncomplex.

Personality

The third broad area to isolate for study is the area of personality characteristics. In this study six personality characteristics have been selected for sutdy: (a) awareness and sensitivity to one's own internal feeling states and to the external world, (b) inner-directedness versus other-directedness, (c) aggression and dominance, (d) punitiveness, (e) ego-strength, and (f) defensiveness in relation to other people.

More successful therapists, possessing more sensitivity and awareness, are better able to perceive and understand the individualistic meanings of the patient's behavior. More successful therapists are expected to express inner-directedness in the form of individualism and dislike of rules and structure. Such non-conformity enables them to work out solutions to the patient's problems through collaboration and exploration.

This writer expects that the more successful therapist, in functioning in an independent and individualistic manner, can feel comfortable in permitting the patient to express his own individuality no matter how different it is from the therapist's. The more successful therapist can encourage individuality while at the same time being aware of and

reminding the patient of the reality limits on his behavior and functioning.

The writer feels that data from previously mentioned sources can be interpreted to lead to the expectation that more successful therapists would be more dominant and aggressive, enabling them to participate actively in their day-to-day tactics with patients, rather than setting a pattern of permissiveness, interpretation and instruction. More successful therapists are expected to be less punitive and thus to express their aggression and dominance in ways which further patient progress rather than in intolerant, hostile, moralistic and extra-punitive ways which would act as a hindrance to the patient's progress. In addition, this writer expects that when therapists are able to express dominance and aggression in nonpunitive ways it communicates to the patient good self-control and lack of fear of hostile, punitive impulses with a conseauent growth of assertiveness and social self-confidence. This writer feels that when a therapist is able to express dominance and aggression in non-punitive and non-controlling ways, he creates a situation in which the schizophrenic patient can perhaps for the first time feel free to express his own feelings without fear of changing or destroying the therapist, nor will he have to be afraid of punitive retribution for the expression of his feelings. Furthermore it is believed that non-punitive therapists are also less likely to put negative

values on either their own or the patient's feelings.

The writer would expect that the hypothesized greater ego strength in terms of good judgment and maturity, of the more successful therapist permits him to express his own feelings more appropriately and to set realistic limits on the patient's obnoxious behavior. Successful therapists would be expected to be spontaneous, congruent, empathic and open in their relationships with people and thus better able to gain the trust and cooperation of a difficult patient population. They are less critical of themselves, and their warm and accepting attitude conveys to the patient both self-acceptance as well as acceptance of the patient as he is. The therapist acts as something of a model for the patient. Where previously the patient felt it necessary to defend from awareness areas of his own feelings, experience and behavior because of his self-criticism, he is now better able to become aware of himself without threat and defense.

Whitehorn and Betz (1960, p. 222) explain and summarize the eifference between A and B therapists and their interaction with their patients in this manner:

> A's with interests resembling lawyers, have a problem-solving, not a purely regulative or coercive approach. This is acceptable to the resentful boxed-in patient likely to respond to prescriptive pressures by more withdrawal, and to mere permissiveness by inertia. Much of the psychotic symtomatology and behavior of the schizophrenic patient and the nature

of the personal issues with which he is preoccupied, seem a direct expression of a special orientation toward authority as external and imposed. His classical inward experience of feeling "controlled" or "influenced" by outside forces both expresses, and is an indicator of his dominant concern with imposed authority. The B therapists with attitudes resembling printer - black or white, right or wrong - are likely to view the patient as a wayward mind needing correction, an approach likely to alienate him further rather than intrigue him into hopeful effort.

By reason of a basic self-distrust, the schizophrenic patient does not live interdependently by give-and-take in personal leadership and in cultural expectations, but avoids involvement with others. In the A therapist he would find the values of responsible self-determination more honored and exemplified than those of obedience and conformity - an emphasis providing an avenue of progress out of his own entanglements in mutinous commitments toward authoritative influences seen as imposed from external sources. The A physicians, in their clinical styles of transaction with schizophrenic patients, reveal a capacity to be perceptive of the individualist inner experiences of the patients, while themselves functioning in responsibly individualist roles. And, solutions to the patient's problems are worked out through collaborative exploration of possibilities rather than in the model of authoritative instruction.

In the B physicians, in contrast, the patient would find an emphasis on value systems weighted more heavily toward deference and conformity to the way things are. The particular rigidity of attitude implied by their mechanically inclined interests and orientation toward precision and a rule-of-thumb approach probably constitutes an actual hindrance to the development of self-trust and social spontaneity in the schizophrenic patient.

> Therapists whose attitudes tend to expect and respect spontaneity tend to evoke self-respectful social participation more effectively than those whose attitudes tend to restrict spontaneity by preference for conventionalized expectations. This appears to be the basic difference in attitude between A and B therapist. The therapist whose attitudes to social situation are like those of the lawyer, who assumes that there is leeway for solving individual problems and for achieving individually desired goals within reasonably broad interpretations of society's rules and family expectations has the better prospect for opening up for the patient possible appealing prospects, of discovering personal problems rather than mere frustrations and thereby eliciting more problem-solving effort and participation in life.

This writer expects then, that less successful therapists are more other directed. They are more concerned with conformity than with the development of individuality. A schizophrenic lack of order either in fact or in a relationship would be very anxiety-producing for these therapists. Ambiguity cannot be tolerated. The ambiguous meanings of the schizophrenic's behavior and words are a threat to the less successful therapist, who can feel secure only when he operates in a clear and certain world, a world which is predictable and understandable and one in which there are clear goals and clearly prescribed means for reaching them. Individuality and uniqueness are not valued, first of all becuase they may not be understood and secondly because they may necessitate tolerance for feelings and behavior which, while not destructive to the patient or others, may be

contrary to the norms of society. In the writer's opinion the less successful therapist has not undergone the rigorous and frightening test, as it were, of developing and appreciating his own uniqueness. He would be expected to be punitive and critical in attitude towards his own unacceptable feelings and thus punitive and critical towards anyone else who expresses attitudes and feelings which he considers unacceptable.

Hypotheses of the Study

In this research the basic hypothesis is based upon the construct "successful therapist". That such a construct is useful and necessary at all is in turn based upon the observations mentioned earlier that differences between therapists do exist and these differences are important to their interaction with patients. Whitehorn and Betz support this belief with evidence that differences between therapists are related to the improvement of schizophrenic patients. Among the differences between their therapists were some empirical differences in the way in which they answered certain items on the SVIB. The basic hypothesis in the present research is that when therapists are identified by their scores on the Whitehorn-Betz A-B Scale of the SVIB, the variance in scores on the A-B Scale can be accounted for by variables which are considered important to the therapeutic relationship.

Cronbach and Meehl (1955) emphasize the importance of

"stating the constructs which account for the variance in test scores". In this situation the emphasis falls upon defining the constructs which account for the variance in scores on the A-B Scale. The basic construct for which validity is to be established is "successful therapist". Subsumed under this seem to be several variables which appear to interact in such a manner as to result in successful therapy. A successful therapist is expected to be highly verbally fluent, to be aware of and sensitive to himself and others, to be inner-directed, to be aggressive and dominant, to be non-punitive, to be high in ego-strength, and to be relatively free of defensiveness in his relationships with other people. A less successful therapist on the other hand is expected to be lower in verbal fluency, to be less aware of and more insensitive to himself and others, to be other-directed, to be passive and conforming, extrapunitive and hostile, to possess less ego-strength and to be more defensive in his relationships with other people.

There are several general hypotheses to be tested in this study. These are:

1. Persons scoring high on the A-B Scale will also score high on verbal ability tests.

2. There will be differences in awareness and sensitivity between subjects, with those persons scoring high on the A-B Scale being higher in sensitivity and awareness than those persons scoring low on the scale.

3. There will be differences between subjects in inner-directedness as opposed to other-directedness, with those persons scoring high on the A-B Scale being more inner-directed and those scoring low being more other-directed.

4. There will be differences in aggressive and dominance between subjects with those persons scoring high on the A-B Scale being more aggressive, assertive, dominant and authoritative while those persons scoring low on the Scale are more abasive, passive and retiring.

5. There will be differences in ego-strength between subjects, with those persons scoring high on the Scale being considered as possessing good judgment and maturity while those scoring low considered as more immature, impulsive and under- or over-controlled.

6. There will be differences in defensiveness in relationships with other people between subjects, with those persons scoring high on the Scale being lower in defensiveness and those scoring low on the Scale exhibiting greater defensiveness.

METHOD

The subjects for this study consist of 107 medical students who designated "psychiatry" as their choice of specialty at graduation from medical school. The subjects are part of a larger pool of subjects participating in a longitudinal study carried out by the Association of American Medical Colleges.

In 1956, the Association began, in cooperation with the Institute of Higher Education at the University of California, an effort to obtain information and seek solutions for the problems that surround the increases in numbers of students seeking higher education. The primary concern was with the relationship of levels of ability and of personal and social characteristics to the type of career chosen and to later performance in that career. In the fall of 1956, a battery of psychological instruments was administered to the entire entering classes of 28 representative medical schools. The design of the study was essentially longitudinal in character, since it was the underlying continuity of the process that was of interest. Over 2,800 students in the 28 participating schools filled out the Allport-Vernon-Lindzey Study of Values, the Edwards Personal Preference Schedule, and the Strong Vocational Interest Blank. In addition, other information was obtained such as scores on the Medical School Aptitude Test, peer ratings on a variety of characteristics, and ranks

in class. In the senior year of medical school additional experimental instruments were employed and information on choice of career was obtained. At this time, 107 subjects for whom complete data are available designated Psychiatry as their specialty choice, and these are the subjects in the present study.

Procedures

The data for this study were obtained from several sources. The Medical College Admission Test (MCAT) which measures both ability and college achievement, is available as a source of data on intellectual variables of the subjects. Personality data were obtained from two primary sources: The Allport-Vernon-Lindzey Study of Values (AVL) and the Edwards Personal Preference Schedule (EPPS).

The AVL is an instrument designed to assess six major value dimensions: Theoretical, Economic, Aesthetic, Social, Political and Religious (Allport, Vernon, and Lindzey, 1960). The EPPS is a standardized inventory based on personal needs which can be expected to be manifested in varying degrees in the normal population (Edwards, 1954). The Strong Vocational Interest Blank (SVIB) is a device to provide an index of similarity between an individual's interests and those of successful men in each of a wide range of occupations (Campbell, 1966). In this study, data from the SVIB will be used only to establish position on the A-B Scale.

The specific measuring instruments included in this study will be used in the attempt to establish validity for the construct "successful therapist". The assumption in the study is that the A-B Scale differentiates between more and less successful therapists. Those subjects scoring high on the scale are assumed to have the qualities belonging to successful therapists and those scoring low to have the qualities of less successful therapists. These personality attributes have previously been stated in the form of general hypotheses. Data from the MCAT, and AVL, and the EPPS will be used to test these general hypotheses. Specific hypotheses can be made in terms of the data available from these measuring instruments:

1. Subjects who score higher on the A-B Scale will be expected to score higher on the MCAT.

2. Subjects who score higher on the A-B Scale will score higher on the Theoretical, Aesthetic and Social scales of the AVL, and lower on the Economic and Religious scales.

3. Subjects scoring higher on the A-B Scale will score higher on the following EPPS scales: Achievement, Autonomy, Intraception, Dominance, and Aggression, and lower on Deference, Order, and Abasement.

The subjects will be divided into two groups on the basis of their scores on the A-B Scale. Campbell et al. (1967) in the revision of the A-B Scale converted raw scores into standard scores where the mid-point between the two groups

was approximately 50, with the A group averaging 60, the B group 40, and with an overall standard deviation of 10. This division will be used with the present sample. Fifty will be used as the dividing point for the two groups, with all subjects whose scores fall at 50 or below considered as B subjects and those with scores above 50 as A subjects.[1]

Means and variances will be calculated for each of the two groups on each scale. Variances will be tested by means of the F test for homogeneity of variance. The t for the value of the difference between the means for each scale will be calculated. Where there is heterogeneity of variance the t will be calculated using an unpooled estimate of the variance. In this study the probability level acceptable for the rejection of the null hypothesis will be .025 for one-tailed tests.

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[1]All data for this study were supplied by Dr. E. B. Hutchins, former Research Director for the Association of American Medical Colleges.

RESULTS

In the previous chapter three hypotheses were made. The results are presented in relation to the hypotheses proposed in the previous chapter.

Hypothesis 1. Subjects who score high on the A-B Scale will also be expected to score higher on the MCAT.

This hypothesis was not supported by the data, as indicated in Table 1. However, the differences which did appear (even though non-significant) were in the predicted direction with the A subjects having a slightly higher mean on the Verbal section of the MCAT and B subjects performing better as a group on the Quantitative section.

Inspection of the data on this variable led to a search for patterns of differences within the groups which might in turn support the general nomological network. Therefore the difference among the A subjects on their performance on the Verbal and Quantitative sections of the MCAT was examined by a *t* test between the means of the two sections. The same procedure was used for the B subjects. These comparisons are presented in Table 2. Even though the A's performed only slightly better than the B's on the Verbal section, when the A's were examined alone, the difference between their Verbal mean score and their Quantitative score was significantly different. The mean score for the A subjects on the Verbal

section was 57.52 while their mean score on the Quantitative section was 53.21. The t value for a difference of this magnitude is 3.399 which is significant at the .005 level for one-tailed tests. The mean for the B subjects on the Verbal section was 56.59 and on the Quantitative section was 55.12. This difference was not significant.

Hypothesis 2. Subjects who score higher on the A-B Scale will also score higher on the Theoretical, Aesthetic and Social scales on the AVL and will score lower on the Economic and Religious scales.

This hypothesis was supported in part by the results presented in Table 3. The largest significant difference between the A subjects and the B subjects occurred in their performance on the Aesthetic scale of the AVL. The mean for the A subjects on this scale was 46.49 while the mean for the B subjects was 38.19. The difference between these two means had a t value of 4.167 which is significant beyond the .005 level for one-tailed tests.

There was no significant difference between the means of the A and B subjects on the Theoretical scale, although the difference which did occur was in favor of the B subjects and approached significance at the .10 level for one-tailed tests.

It seemed desirable to depart from the planned analysis at this point to inspect the patterns of interests or values

Table 1. Medical College Admission Test (MCAT) T scores of A and B subjects

MCAT Subtests	Mean		Variance		t
	A Subjects	B Subjects	A Subjects	B Subjects	
Verbal	57.52	56.69	70.06	46.42	0.496
Quantitative	53.21	55.12	69.60	94.82	1.031
Gen. Sub.	55.89	56.84	67.18	71.94	0.544
Science	53.77	52.62	73.74	72.24	0.635

Table 2. Comparison of relationship between verbal and quantitative scores on MCAT of A and B subjects

	Verbal		Quantitative		t
	Mean	Variance	Mean	Variance	
A Subjects	57.52	70.06	53.21	69.60	3.399[a]
B Subjects	56.42	46.42	55.12	94.82	.745

[a]Significant at the .005 level for one-tailed tests.

within groups instead of between groups. The results are presented in Table 4. When the data were examined in this manner a significant difference between the means on the Theoretical and Aesthetic scales occurred for B subjects but not for A subjects. The mean score for the B subjects on the Theoretical scale was 49.28 while the mean score on the Aesthetic scale was 38.19. The magnitude of this difference was calculated and received a t value of 5.077, which is significant beyond the .005 level for one-tailed tests.

Table 3. Allport, Vernon, Lindzey Study of Values raw scores for A and B subjects

	Mean		Variance		t
	A	B	A	B	
Theoretical	47.04	49.28	49.44	51.05	1.502
Economic	32.84	36.47	59.16	102.06	1.819[a]
Aesthetic	46.49	38.19	94.14	77.12	4.167[b]
Social	36.75	37.94	54.60	32.19	.814
Political	40.97	40.25	30.76	33.61	.609
Religious	35.91	37.87	120.60	127.08	.842

[a]F was calculated to test homogeneity of variance. F was found to be significant at the .01 level but not the .05 level. On this basis t was calculated using an unpooled estimate of the variance. Significant beyond the .050 level for one-tailed tests.

[b]Significant at the .005 level for one-tailed tests.

Table 4. Relationship between aesthetic scale scores and theoretical scale scores within groups for A and B subjects

	Theoretical		Aesthetic		t
	Mean	Variance	Mean	Variance	
A Subjects	47.04	49.44	46.49	94.14	.397
B Subjects	49.28	51.05	38.19	77.12	5.077[a]

[a]Significant at the .005 level for one-tailed tests.

The mean for the A subjects was 47.04 on the Theoretical scale and 46.49 on the Aesthetic scale. This difference was not significant.

The difference between the means of the A and B subjects on the Social scale of the AVL was not of a magnitude considered to be significant, and this part of the hypothesis was not supported.

The prediction that A subjects would score lower on the Economic scale of the AVL was upheld by the data which appear in Table 3. The difference between the means of the A and B subjects was significant at a probability level of .025, but examination of the variances for homogeneity necessitated a recalculation of t using an unpooled estimate of the variance. When this procedure was used, the probability of the difference between the means of the two groups dropped to the .050 level.

The last part of the second hypothesis was not upheld. There was no significant difference between A and B subjects on the Religious scale of the AVL.

Hypothesis 3. Subjects scoring higher on the A-B Scale will also score higher on the following EPPS scales: Achievement, Autonomy, Intraception, Dominance and Agression and will score lower on Deference, Order and Abasement scales.

The results are found in Table 5. The predictions for higher scores were upheld on only one scale, the scale

measuring Autonomy. On this scale the A subjects had a mean of 53.23 while the B subjects had a mean of 49.00. The magnitude of this difference had a *t* value of 2.531 which is significant at the .025 level for one-tailed tests.

There were no significant differences between the means for the two groups on the Achievement, Intraception, Dominance and Aggression scales.

Differences between the two groups did appear on the scales measuring need for Order and Deference. On both of these scales the A subjects scored lower while the B subjects scored higher. The A subjects had a mean of 46.05 on the Order scale while the B subjects had a mean of 52.25. The magnitude of this difference had a *t* value of 3.217, which is significant beyond the .005 level for one-tailed tests. On the Deference scale the A subjects had a mean of 45.03 and the B subjects had a mean of 48.50. The magnitude of this difference has a *t* value with a probability of less than .10 for one-tailed tests. While this does not reach the acceptable level of significance for this study, it is in the predicted direction and sufficiently high that there is some justification for including this result in the evaluation of the construct.

As in shown in Table 5 there was no significant difference between the means for the two groups on the scale measuring the need for Abasement.

Table 5. Edwards Personal Preference scale T scores for A and B subjects on those scales to which predictions were made or which were successful in distinguishing between the two groups

	Means		Variances		
	A	B	A	B	t
Achievement	55.27	54.66	87.85	111.91	.297
Deference	45.03	48.50	99.59	133.29	1.572[a]
Order	46.05	52.25	78.32	94.90	3.217[b]
Autonomy	53.23	49.00	62.93	61.68	2.531[c]
Succorance	46.20	50.91	74.81	91.12	2.498[c]
Intraception	57.41	56.19	60.33	100.61	.683
Dominance	47.83	49.19	58.06	118.35	.740
Abasement	44.28	44.16	102.66	109.17	.057
Change	49.81	46.31	92.48	106.74	1.686[d]
Aggression	51.68	53.41	66.34	62.24	1.012

[a]Significant beyond the .10 level for one-tailed tests.

[b]Significant at the .005 level for one-tailed tests.

[c]Significant at the .025 level for one-tailed tests.

[d]Significant beyond the .050 level for one tailed tests.

Additional Findings. Two additional results are shown in Table 5. There were no specific predictions made in expectation of these results. They are included, however, because it is felt that they provide added support for the construct under consideration.[1]

[1]See Appendix A for all scales.

A difference between the two groups appeared on the Succorance scale. The A subjects had a mean of 46.20 and the B subjects had a mean of 50.91. The value of *t* for the mean difference was found to be 2.498 with a probability value of .025 for one-tailed tests.

A second difference was noted although it did not reach the level acceptable for statistical significance in this study. An examination of the means for the two groups on the EPPS scale purported to measure need for Change revealed a difference which was large enough to receive a probability value less than .050 for one-tailed tests. The mean for the A subjects on this scale was 49.81 while the mean for the B subjects was 46.31. The *t* value for a difference of this magnitude is 1.686.

DISCUSSION

Before discussing the results previously presented, it is of interest to compare some findings in this study with the results of Campbell *et al.* (1967). The present research does represent a cross-validation of sorts of the construction of the revised Whitehorn-Betz A-B Scale. Campbell's study resurrected the original criterion groups of A and B doctors - 72 members of the psychiatric resident staff on the Henry Phipps Psychiatric Clinic. The criterion groups included 49 A's and 23 B's. The raw scores were converted to standard scores using a modification of the usual raw score-standard score conversion formula. The means of the two groups were averaged, as were the standard deviations, and those average figures were used in a conversion formula. The net effect was to convert the raw scores into standard scores where the mid-point between the two groups was approximately 50, with the A group averaging 60, the B group 40, and with an overall standard deviation of 10. The resulting scale was not cross-validated, but the authors felt that the technique used had proved itself sufficiently that differences between the groups would not evaporate in a new sample. However, the A-B samples were much smaller than those used for the regular SVIB scales, which would make the scales more susceptible to cross-validation shrinkage. While the

same techniques for selecting A and B subjects were not used in the present study, and 50 was deliberately selected as the midpoint between the two groups, it is interesting to notice that not only do the numbers in each group remain roughly numerically proportional to those in the original sample but the differences between the averages of the A subjects and the B subjects has not changed radically. In this study the average for the A subjects was 62.92 on the A-B scale while the average for the B subjects was 44.37. There were 75 subjects whose scores fell into the A group and 32 subjects whose scores fell into the B group.

Some of the hypotheses of this study were supported by the results, while there were also some failures in prediction. The prediction that A subjects would demonstrate higher verbal performance on the MCAT was not upheld by the data. While there is no significant difference between the two groups of subjects in their functioning on an aptitude-achievement test, it is apparent that the two groups of subjects have different patternings within themselves, with the A subjects performing relatively higher on verbal tasks than on quantitative tasks. There is very little difference and none of significance in the patterning of performance on verbal and quantitative tasks for the B subjects. With the restricted range of ability expected in this group of subjects it would be difficult to find significant differences

in overall achievement and ability. However, it is of interest that the balance in favor of ability and achievement within the A subjects lies in the verbal direction, while they show significantly less ability and achievement in the quantitative area.

This finding may be partially responsible for the fact that occupations with heavy literary-verbal orientations ranked highest on the SVIB A-B Scale (Campbell et al., 1967). It might also be hypothesized that this heavy balance in favor of verbal skills relative to quantitative skills may give the appearance of higher intelligence in day-to-day contacts with subjects of the A type. One would expect them to be at their best in situations where words are required; this is the area in which they have had the most experience and are most adept. In contrast, B therapists are not discrepant in their achievement and ability, which suggests that they have arranged their past experiences so that they are as comfortable in situations requiring quantitative skills, which are not interpersonal situations, as in situations requiring verbal skills. The possibility also suggests itself that their equal ability and aptitude in quantitative skills as in verbal skills, in contrast to the A's, may influence the types of situations where B subjects prefer to exercize their verbal skills. In short, the MCAT may provide the type of situation where B subjects

exercise their verbal skills equally as well as the A subjects; a non-interpersonal, highly structured setting.

The difference between A and B subjects on the Aesthetic scale of the AVL was distinctively the greatest difference which appeared between the two groups. It not only supports the conclusions of Campbell et al. (1967) and Whitehorn and Betz (1960) that A therapists are verbally oriented but also suggests that this verbal orientation includes characteristics which might be inferred to include a creative orientation. Allport, Vernon and Lindzey (1960) base their scales on the classifications of basic interests or motives in personality as described by Spranger. According to the authors of the AVL:

> The aesthetic man sees his highest value in form and harmony. The aesthetic man need not be a creative artist, but he is aesthetic if he finds his chief interest in the artistic episodes of life. Furthermore, the authors consider the aesthetic attitude, in a sense diametrically opposed to the theoretical; the former is concerned with the diversity and the latter with the identities of experience. In the economic sphere the aesthetic sees the process of manufacturing, advertising, and trade as a wholesale destruction of the values most important to him. In social affairs he may be said to be interested in persons but not in the welfare of persons; he tends toward individualism and self-sufficiency. Aesthetic people oppose political activity when it makes for the repression of individuality.

The A subjects are characterized as placing a high value on individualism and self-sufficiency while the B

subjects do not demonstrate as strong an interest in these motives or values.

Examination of scores on the Theoretical scale revealed that the A's did not score as high as the B's even though the difference between the two groups was not significant. Looking at the data another way however disclosed significant differences in the patterns within the groups. The A's scored about the same on both the Aesthetic and the Theoretical scales, while the B's were high on the Theoretical scale and significantly lower on the Aesthetic scale. The A subjects can be described as demonstrating an interest in an empirical, rational, critical approach toward problems while also valuing individualism and self-sufficiency. In contrast the B's place distinctly less value on self-sufficiency and individualism while placing a slightly higher value on the rational, critical empirical approach to life.

Allport, Vernon and Lindzey (1960) describe the dominant interest of the theoretical man as the discovery of truth. The theoretical man takes a "cognitive" attitude and seeks only to observe and reason. He is considered an intellectualist and his chief aim in life is to order and systematize his knowledge. In a sense the A subjects are as interested in diversity and individuality as they are in order and systematization, while the B subjects are relatively less concerned with diversity and individuality and far

more concerned with cognitive intellectuality directed toward order and systematization of knowledge.

On the Economic scale the difference between the means of the two groups just missed reaching the acceptable level of significance for this study, but the trend seems worth including in the discussion of the results. Allport, Vernon and Lindzey (1960) describe the economic man as characteristically interested in what is useful. This type is considered thoroughly "practical" and conforms well to the prevailing stereotype of the American businessman. The authors consider this attitude as frequently coming into conflict with other values. The economic man for instance wants education to be practical and regards unapplied knowledge as waste. The value of utility conflicts with the aesthetic value except when art serves commerical ends. B subjects, then, may be considered to be more highly motivated by interests or values which are orientated toward what is practical and useful and to have values which are more similar to the "typical" American businessman. A subjects in contrast experience less conflict in their values and interests, with the Economic motive less high in their value system.

A and B subjects were not distinguished by their scores on the Religious and Social scales of the AVL. The Religious scale was devised by the authors to measure an orientation toward life rather than specific interest in religion per se.

The scale seems to be designed to measure a rather nebulous quality of both negation and affirmation of life, a combination of mysticism and active participation in life. Neither of these scales have demonstrated much variance in research with the population from which this sample was drawn.[1]

The Social scale is designed to measure altruistic values, and neither group demonstrates stronger interest than the other in these pursuits.

In turning to a discussion of the results on the EPPS it appears that these scales begin to clarify and expand on the patterns already presenting themselves in the data previously discussed.

The largest difference between the two groups appeared on the Autonomy scale of the EPPS. Edwards (1959, p. 11) describes the manifest needs associated with this scale as:

> To be able to come and go as desired, to say what one thinks about things, to be independent of others in making decisions, to feel free to do what one wants, to do things that are unconventional, to avoid situations where one is expected to conform, to do things without regard to what others may think, to criticize those in positions of authority, to avoid responsibilities and obligations.

On this scale the A's again scored higher while the B's scored lower. The valuing of independence and

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[1]Personal communication with Dr. E. B. Hutchins.

individuality is again demonstrated by subjects in this study who are similar in some important respects to those subjects in earlier studies who were designated "successful therapists." Subjects who are similar to less successful therapists do not indicate as high a need for independent and individualistic behavior.

The scales of Dominance, Achievement, Intraception and Aggression failed to demonstrate the hypothesized distinction between the two groups of subjects. There are several possible explanations for this failure. It is not surprising, in retrospect, that the subjects were not differentiated by their need for achievement. The subjects were all students in their senior year of medical school, a status which implies a strong achievement orientation. To find a significant difference in need for Achievement within such a group would probably be the exception rather than the rule. Once again, however, the data suggest differences in the manner in which subjects meet their needs for achievement. This difference will be discussed at more length when the results on the Order and Deference scales are discussed.

The lack of differentiation between the two groups on the scale for Dominance indicates that at this point in time neither group has particularly strong needs for leadership, influence or persuasive powers. The A group does not meet

the expectation of stronger needs for Dominance. It must be remembered that at this point in time neither group has had sufficient experience to lead to the development of skills in carrying out psychotherapy. And both groups have had long experience in a highly structured situation where qualities such as arguing for one's own point of view, persuading and influencing others to do what one wants, and supervising and directing the actions of others would generally be considered innappropriate and undesirable behavior. Perhaps in later years, differences between these groups might show up, although in view of the A subjects' preference for individuality and independence they may in fact never develop the needs for Dominance as defined and measured by the EPPS. They may continue to value other people's independence and individuality as much as they value their own.

It was hoped that the scale for Intraception would measure some of the qualities which might be considered important in terms of empathic abilities or needs. If the needs involved in the Intraception scale are in fact reflections to some degree of empathic qualities, it appears that both groups are fairly equivalent in the possession of these needs. The scale is, of course, not a measure of how well individuals meet these needs, but in view of evidence previously discussed one might suspect that the A subjects and the B subjects differ not in the possession of these

needs but in the ultimate ends towards which they are directed.

The least surprising failure in prediction was that A subjects would score higher on the Aggression scale. To a very slight degree this need, as measured by this scale, overlaps those needs measured by the Autonomy scale. In general, however, this scale purports to measure a type of aggression which has a negative, hostile quality rather than a self-assertive, self-expressive type of aggression. Both the Aesthetic scale of the AVL and the Autonomy scale of the EPPS imply the possession of active, assertive qualities of aggression whose primary purpose does not seem to be destructive, revengeful or hurtful in nature. This writer feels that the construct of Aggression is commonly designed to take into account only a limited aspect of aggression and for that reason does not pick up differences between the groups studied here.

Another possibility, however, must also be considered. Again it is important to remember that these measures were taken at a particular point in time. The subjects are medical students and have not yet had to seriously explore their own feelings and those of others, so they may simply be unaware of the many ways in which their own aggressive needs are manifested. In this event it appears that both groups are equally unaware. This writer would expect that

the A subjects who actually continue into the practice of psychiatry would become more aware of their own aggressive needs and perhaps even become more adept at expressing them in overt verbal behavior. This expectation is based on the work of Bandura, Lipsher and Miller (1960) who found that therapists who were typically able to express hostility in direct forms and who displayed a low need for approval were also more likely to encourage and permit their patients' hostility than were therapists who expressed little direct hostility and who showed high approval-seeking behavior. Again, however, the quality of aggression as defined and measured by the EPPS is not identical to the type of aggression derived from the construct developed in this study. A therapists may be more willing to admit, however, to this type of aggression at some later date.

A subjects were expected to score lower than B subjects on three of the EPPS scales: Order, Deference and Abasement. They did perform as predicted on two of the scales but were not significantly different from the B's on the third.

Examination of the scale measuring need for Order disclosed the B subjects showing greater needs for Order than the A subjects. Edwards describes the Order scale as follows:

> To have written work neat and organized, to make plans before starting on a difficult task, to have things organized,

> to keep things neat and orderly, to make advance plans when taking a trip, to organize details of work, to keep letters and files according to some system, to have meals organized and a definite time for eating, to have things arraged so that they run smoothly without change.

It might be inferred from this description that a person with a high need for order is a person who prefers certainty, routine and structure in his daily life. At this point it might be helpful to return to a statement made earlier regarding the manner in which A's and B's expressed their needs for achievement. The first hint of differences in manner of achieving came from the AVL, where the B subjects score higher on the Economic motive, giving some indication that they prefer over a relatively more conforming, routine and conventionally acceptable way of life. This notion is supported by the B's performance on the Aesthetic scale. It is supported again by the differences among the B subjects on the Theoretical and Aesthetic scales. The B subjects prefer a rational, empirical, critical approach to problems, but with the added aspect of preferring to use this approach to order and systematize knowledge. These subjects are averse to diversity and individualism. One might expect then that B subjects are highly motivated to achieve but in conventional, conforming, commonly acceptable modes and that their intellectual endeavors are directed toward building and maintaining routine and order in their daily lives.

The Deference scale is described thus:

> To get suggestions from others, to find out what others think, to follow instructions and do what is expected, to praise others, to tell others that they have done a good job, to accept the leadership of others, to read about great men, to conform to custom and avoid the unconventional, to let others make decisions.

Again it is found that B subjects prefer to conform to have an outer structure imposed in the form of instructions, to be followers rather than leaders, and to want to know what others think and expect of them. It was mentioned earlier that there was no significant difference between the groups on the Intraception scale; insofar as this scale measures empathic needs, the groups could not be considered different in their possession of these needs. It can be hypothesized on the basis of the previous evidence, though, that perhaps the groups differ in the ways in which they meet these needs. The A subjects, valuing individuality and diversity, may direct their needs towards the understanding of the uniqueness and differences in themselves and others, as well as to becoming more favorably disposed towards these differences. The B subjects may direct their needs towards trying to find out what is expected of them and to attempt to diminish the differences which they might perceive between themselves and what might be considered the conventional world.

No significant difference between the two groups of subjects was found on the scale purported to measure need

for Abasement. This lack of difference between the subjects on this scale is not easy to explain in view of the B subjects' preference for structure, conformity and dependence on the opinions of others. It would appear that both groups are equally comfortable with themselves and their way of life, and neither group is particularly burdened with feelings of guilt, anxiety or the need for self-punishment or criticism.

There were two additional results which are important in the discussion of the difference between the two groups of subjects. A difference between the two groups appeared on the Succorance scale of the EPPS. This scale is purported to measure the following:

> To have others provide help when in trouble, to seek encouragement from others, to have others be kindly, to have others be sympathetic and understanding about personal problems, to receive a great deal of affection from others, to have others do favors cheerfully, to be helped by others when depressed, to have others feel sorry when one is sick, to have a fuss made over one when hurt.

The B subjects prefer being in the position of depending on other people to meet their needs for support, encouragement, sympathy and understanding. Previous results would indicate they take care to insure that these needs are met by being conformers, followers, and being less inclined to risk the ire of those in authority by criticizing them or by pursuing a path of individuality and independence.

A second scale disclosed differences between the two groups of subjects even though the differences were not of sufficient magnitude to be considered statistically significant in this study. The A subjects scored higher on the scale measuring need for Change, which Edwards defines as follows:

> To do new and different things, to travel, to meet new people, to experience novelty and change in daily routine, to experiment and try new things, to eat in new and different places, to try new and different jobs, to move about the country and live in different places, to participate in new fads and fashions.

This scale is considered important because it offers additional support for the general pattern of differences which is emerging between A and B subjects. Since both A and B subjects have maintained themselves in a rather routine, regulated and structured environment for a considerable number of years (primary, secondary, undergraduate and professional schools) with apparent success it might be inferred that needs measured by this scale are met primarily in the cognitive realm. The quality of the scale is one of preference for new experience and dislike of conformity and routine in daily life. This fits into the general pattern of the A subjects as being more oriented toward individuality and independence and adds a quality of adventuressness and enjoyment of novelty and change.

Validation of the Construct

The purpose of this study is to establish construct validity for the Whitehorn-Betz A-B Scale. It seemed that the most available way to do this was to assume the scale measured what it was purported to measure; a differentiation between more and less successful psychotherapists. The problem then became one of establishing a construct of "successful psychotherapist" and investigating the ability of the scale to predict the characteristics assumed to be possessed by a "successful psychotherapist."

In the first chapter, six characteristics were developed within the categories of intellectual, interest and personality characteristics. Assumptions were made in the form of general hypotheses about the characteristics of successful and less successful psychotherapists. In the second chapter, three specific hypotheses were presented which derived from the original assumptions about successful psychotherapists. These three hypotheses were stated in such a manner that methods were available for obtaining data to evaluate the hypotheses. The data obtained from these hypotheses designed to designate specific methods of measurement must now be used to evaluate the general hypotheses which specified no direct method of measurement, and therefore were not immediately susceptible to validation.

The first general hypothesis pertained to a relationship between scores on the A-B Scale and verbal ability. It was expected that a high score on the A-B Scale would be accompanied by higher scores on verbal ability tests. The data did not uphold this hypothesis in this sample of subjects, although the higher verbal ability among the A subjects (those scoring above 50 on the A-B Scale) as compared with their quantitative ability lends some support to the possibility that these subjects are more verbally fluent even though not possessing more ability than the B subjects.

The second hypothesis held that subjects scoring higher on the A-B Scale would also be more sensitive to, and aware of, both themsleves and others. While there are no data which provide a direct measure of sensitivity and awareness, the general pattern which emerged from the data could be implication support the hypothesis that A subjects are more sensitive to and aware of themselves and others in a manner which could be condusive to greater competence in psychotherapy. A subjects have been described as more interested in the artistic episodes of life, interested in and attracted by diversities, interested in people, and in opposition to forces which make for repression of individuality. From this standpoint it might be inferred that A subjects are highly sensitive to and interested in individual differences - their own as well as others - that they like and value individual

differences, and that they are more likely to become aware of those aspects of society which act to lessen the development of individuality. The strength of their aesthetic interests implies a sensitivity to the many possibilities in life, and a motive for expressing some of these possibilities through their own actions. These people, rather than choosing some other medium for expression, have chosen to work with people. Rather than seeing a piece of music, a poem, or a painting result from their awareness and sensitivity to the world and their own feelings, they prefer to see the development of individual potentiality or an individual life. The A subjects value independence and individuality, which makes them better able to understand and appreciate the individuality of the patient and to assist him in developing the self-assertion necessary for independence.

A subjects were also hypothesized to be more inner-directed, while B subjects were expected to be more other-directed. These terms were taken from Riesman (1950), who describes the inner-directed person as having the locus of his direction within himself. The inner-directed person is characterized as having increased personal mobility, greater initiative to cope with society's novel problems, and a greater degree of flexibility in adapting himself to ever-changing requirements and in turn requiring more from his environment. Other-directed persons are characterized by

contrast as having the source of direction for their lives located in their contemporaries. The other-directed person is able to achieve a close behavioral conformity through an exceptional sensitivity to the wishes and actions of others. The other-directed person has an excessive need for approval from his contemporaries, beyond that which leads most people to care very much what others think of them. Other-directed people make this approval their chief source of direction and chief area of sensitivity.

The data obtained in this study seem to support this general hypothesis. Performance of the A subjects on both the EPPS and the AVL indicate that they value individuality and independence; they prefer to say what they think, to do things that are unconventional, to avoid situations where they are expected to conform, to do things without regard to what others may think, and to criticize those in positions of authority.

The B subjects prefer an organized, structured life which is well-planned and runs smoothly, to get suggestions from others, to find out what others think, to follow instructions, to conform to custom and avoid the unconventional, to defer to authority, and to let others make decisions. Furthermore they need the support of others in the form of encouragement, sympathy, understanding, and a great deal of affection.

The general hypothesis that A subjects would be more aggressive, assertive, dominant and authoritative was not supported directly by the data. The general qualities described by the Aesthetic scale, the Autonomy scale, and the Change scale lead to the belief that these subjects must be more aggressive, assertive, dominant, and perhaps authoritative, or at least less willing to accept authority as their locus of direction, in order to express this independence and individuality and to engage in activities which are new and novel.

There is nothing to support directly the general hypothesis that B subjects are more abasive, as defined by the EPPS, but they are more willing to accept the leadership of others, want to lead a life which is not disrupted by the unexpected, are more dependent on others for both help and good opinion, and are more likely to ascede to authority figures. This description suggests a more passive, abasive and retiring mode of living.

Again there is nothing in the data to support directly the hypothesis that A subjects will be higher in ego-strength, possessing good judgment and maturity, while B subjects are more immature, impulsive, and under- or over-controlled. The striving for independence and the need to express, one's own individuality, even if it means criticizing those in authority may give the A subjects the appearance of greater

maturity. The need for leadership of others and a restricted, orderly way of life may give the appearance of immaturity to the B subjects, when compared with A subjects.

The final general hypothesis maintained that there would be differences in defensiveness in relationships with other people between the A subjects and B subjects. The data may be interpreted to support this hypothesis fairly well. There is some reason to believe that A subjects are more verbally fluent, that they are interested in people and stress values which encourage individuality, that they are more likely to say what they think about things and to be unconventional and non-conforming. From this, inferences might be made that A subjects are willing and able to be more open and emotionally honest in their relationships with other people.

B subjects on the other hand have interests more closely resembling the "typical American businessman", have greater needs to be careful and to plan their lives in an orderly fashion, to prefer things to run smoothly without change and are more likely to depend on others for suggestions, to obtain good opinions and to avoid the unconventional, and to prefer to conform to custom. From this it might be inferred that B subjects would be less inclined to be open about their own feelings and opinions, particularly when they perceive they oppose or are different from those of others.

A final point should be kept in mind when evaluating the

results of this study. Here relative differences between two groups are being considered rather than absolute differences between these groups and people in general. In some instances the subjects differ substantially from normative samples, in other instances they do not differ substantially from the average in normative samples. In addition the group with whom the subjects are being compared effects their relative standing on scales of interest. Appendix B and C compare A and B subjects with college men and medical students on the AVL. Appendix D and E illustrate the subjects relationship to college men and to medical students on the EPPS. The main purpose of this study however is to compare relationships between two highly selected samples of subjects.

Relationship of the Construct "Successful Therapist" to Another Construct

The results of this study lead to a more general, overall impression which takes into account all of the differences between the two groups of subjects. In contrast to the B subjects, the A subjects appear to resemble more closely people with characteristics that are usually found in studies of "creative" persons.

There has been an enormous amount of literature published on creativity in the past several years but there is no common acceptance as to the meaning of creativity nor the characteristics which are involved. However, a review

of the creativity literature reveals several ideas which are repeatedly emphasized and about which there is some agreement.

Some writers emphasize that creative persons place a high value upon form and harmony, and exhibit a concern with diversity and individuality. Creative people are also often highly concerned with human values. Stress is also placed on saying what one feels and thinks, doing things that are unconventional, and avoiding situations where conventionality is required. Creative people prefer to do new and different things, to experience novelty and change in their daily lives, to experiment, and to meet new people. These characteristics are all consistent with the descriptions of A subjects taken from the AVL or the EPPS.

Because it appears to this writer that there might be considerable overlaps between the constructs "successful therapist" and "creativity," a brief review of some literature is included in this section.

MacKinnon (1960) has found the combination of high theoretical and aesthetic values along with low economic values to be related to creativity. Fromm (1959) describes the characteristics of creativity as the courage to let go of certainties, to be different and stand in isolation, and to be concerned with nothing but the truth, not only in thought but in one's feelings as well.

Maslow (1959) finds that creative people are what he

terms "self-actualizing people. Those people whom he studied were found to be relatively unafraid of the unknown, the mysterious, the puzzling and are often attracted to it - i.e., they selectively pick it out to puzzle over, to meditate on, and to be absorbed with. He finds these people can be, when the situation calls for it, comfortably disorderly, sloppy, anarchic, chaotic, vague, doubtful, uncertain, indefinite, approsimate, inexact, or inaccurate. Guilford (1959) concluded that individuals who do well on tests of associational fluency tend to have a stronger need for adventure and are more tolerant of ambiguity. Individuals who are high on scores for ideational fluency tend to be more impulsive, more ascendant, and more confident and to have stronger appreciation of creativity than those who score low.

Stoddard (1959) views creativity as an active force and says that when conformity rules it is not because people want it but because they fear deviation. Dow (1959), an architect, believes that one aspect of creativity is the development of a faith in the "wonderful" potentialities of the individual human being. Furthermore he views the majority of people in mental hospitals as being there because they live with too much concern about what he calls "social rightness" in contrast to too little concern with individual rightness. He furthermore views social rightness as passive and individual rightness as active.

May (1959) relates creativity to human relationships. He defines creativity as a process and says that it is the emergence in action of a novel, relational product that grows out of the uniqueness of the individual on the one hand, and the materials, events, people or circumstances of his life on the other. He does not consider creativity relegated to some particular content; he believes it can be expressed equally as well in discovering new procedures in human relationships, or in creating new formings of one's personality as in psychotherapy, as in painting a picture or composing a symphony. He sees the inner condition leading to creativity as openness to experience which is the opposite of psychological defensiveness. It includes a lack of rigidity and permeability of boundaries in concepts, beliefs, perceptions, and hypotheses. Another inner condition necessary for creativity, according to May, is an internal locus of evaluation. By this he means that the value of his product for the creative person is established not by the praise or criticism of other but by himself. A third condition which May considers important is the ability to toy with elements and concepts. Along with openness and lack of rigidity, creativity requires the ability to play spontaneously with ideas, colors, shapes and relationships; from this play comes the ability to see life in a new and significant way.

Anderson (1965) believes there is, in addition to

creative activity such as pointing, writing, and inventing, also a psychological or social creativity. Here the product is not an object as such but creativity in human relations. He feels that creativity in human relations requires intelligence, sharp perceptions, subtle sensitivities, respect for the individual person, and a personal boldness to explain one's point of view and to stand for one's convictions. Creativity in human relationships requires individual integrity and an ability to work with others. Creativity in human relationships is a positive view of human behavior which admits the uniqueness and dignity of man. The creativity with which he is concerned is a form or manner of relating to others which admits of one's own uniqueness and dignity and at the same time respects a uniqueness and dignity in others. Anderson also says, "creativity as personality development is not only a product of openness in human relating; it is a further opening to higher levels of harmony in the universe."

Barron (1963) has made an extensive study of creativity and has related it to psychotherapy. He believes that individuals are interested in creating because to create is to be more fully and more freely oneself. He also finds a great deal of psychological energy expressed in the Rorschach protocols of creative individuals. Furthermore, it is his opinion that rebellion, resistance to acculturation, refusal to "adjust" and adamant insistence on the importance

of the self and of individuality is often the mark of a healthy character. One of the groups which he studied were individuals who were termed "independents" on the Asch test when tested at the Institute for Personality Assessment at the University of California. He found that independents value creative work, both in themselves and others, that they were receptive to new ideas, even apparently impractical ones, and that they were more interested in the originality or aptness of an idea or theory in describing reality than in its possible practical applications. Independents also placed particular value upon the person as an individual and responded more to the inward integrity of another person than to superficial characteristics. Not surprisingly, "independents" are independent: They are not fond of taking orders or integrating with the group or getting along with everyone, nor do they subscribe to the notion that rebellion in youth is to be indulged because young people should be rebellious before settling down sensibly. They do not particularly value strict discipline or tireless and devoted leadership as an alternative to law. Independents tend to keep in communication with their own inner life and feelings and are intraceptive rather than extraceptive. They have empathy. Independents prefer some uncertainty and do not respond favorably to polish and perfection. They prefer imperfections and contradictions which challenge the understanding and call for imaginative

completion by the observor. Thus far, creative people seem to have much in common with the A subjects in this study, who in turn are assumed to be similar to successful psychotherapists.

Barron has also related creativity to psychotherapy. He feels that, of the many reasons why a person may become a therapist, one is that it may be an expression of his own creative selfhood to help others grow. Barron feels that if a therapist can imagine, he can understand; and if he can understand, he can take action to affect. If the therapist has imagination, no personality is alien to him. Barron suggests that in a truly creative personal interaction there are two main principles: first, a certain acceptance of things at face value; and second, a willingness to let the other person be as he wishes, combined with an insistence on being as you wish.

Conclusion

The present study was designed to investigate several variables stated in the form of hypotheses which were thought to be important characteristics of successful psychotherapists. These variables were the possession by successful therapists of higher verbal ability, more sensitivity to and awareness of themselves and others, inner direction, higher aggression, dominance, better ego-strength

in terms of good judgment and maturity, and less defensiveness in relationships with other people. Less successful therapists were hypothesized to be lower in verbal ability, less sensitive to and aware of themselves and other people, more other-directed, more pasive, abasive and retiring, to have less ego-strength, and to be more defensive in relationships with other people.

The data obtained support the hypothesis that A subjects are more inner directed. Inferences might be made from the data to offer support for the hypotheses that A subjects are more sensitive to and aware of themselves and others, and less defensive in their relationships with other people. The data did indicate there were no differences between A and B subjects in verbal ability nor was there appropriate data to offer direct support for the hypothesis that A subjects would have higher ego-strength.

The data offer some support for the hypothesis that B subjects are more other-directed, more passive and retiring. However the data did not support the hypothesis that B subjects are more abasive. The data were not appropriate to evaluate the B's as possessing less ego-strength and from this standpoint this hypothesis is not supported. Nor did the data demonstrate that the B's were lower in verbal ability. Inferences could be made from the data to support the hypothesis that B subjects might be more defensive in their relationships with other people.

SUMMARY

A study of 107 medical students who chose psychiatry at the time of graduation from medical school was carried out. These students were administered the SVIB, the MCAT, the AVL and the EPPS. The intent was to establish a construct of successful therapist as identified by the A-B Scale of the SVIB and to investigate whether subjects scoring high on the scale had characteristics hypothesized as belonging to successful therapists (A subjects) as measured by the MCAT, the AVL and the EPPS. Successful therapists were hypothesized as having higher verbal ability, greater sensitivity and awareness, more inner-direction, greater aggression and dominance, greater ego-strength, and less defensiveness in their relationships with other people. Less successful therapists (B subjects) were hypothesized as being more other-directed, more abasive, more passive and retiring, more immature, more impulsive and under- or over-controlled, and more defensive with other poeple.

The data indicated that A subjects were individualistic and independent, possibly more verbally fluent, had greater needs to say what they think about things, to do things that are unconventional, to avoid situations where they are expected to conform, to do things without regard to what others may think, and to criticize those in positions of

authority. The data also lend support for greater assertiveness of the A subjects, greater needs for change and novelty, and less interest in economic motives. These data could be interpreted as support for the hypotheses about successful therapists. There was nothing obtained to provide much support for the hypothesis about ego-strength.

B subjects were characterized by the data as being less concerned with individualism and independence, to have greater needs for conformity and structure, and to follow custom. In addition they show greater needs for the support of other people in terms of encouragement, sympathy, understanding and a great deal of affection. These data can be interpreted to support the hypotheses that B subjects are more other-directed, more passive and retiring, less dominant and assertive, and more defensive in their relationships with other people.

The results therefore seem to provide reasonable support for the construct "successful therapist" and to coincide quite well with the descriptions Whitehorn and Betz give of their successful psychotherapists.

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APPENDIX A

Means, variances and t's for A and B subjects on fifteen scales of the Edwards Personal Preference Schedule, T scores

	Mean		Variance		
	A subjects	B subjects	A subjects	B subjects	t
ach	55.27	54.66	87.85	111.91	.297
def	45.03	48.50	99.59	133.29	1.572[a]
ord	46.05	52.25	78.32	94.90	3.217[b]
exh	47.60	48.03	92.19	84.16	.216
aut	53.23	49.00	62.93	61.68	2.531[c]
aff	48.87	46.97	103.36	74.81	.923
int	57.41	56.19	60.33	100.61	.683
suc	46.20	50.91	74.81	91.12	2.498[d]
dom	47.83	49.19	58.06	118.35	.643
aba	44.28	44.16	102.66	109.17	.057
nur	50.51	49.00	94.93	87.29	.741
chg	49.81	46.31	92.48	106.74	1.686[d]
end	49.61	49.03	70.75	69.77	.328
het	53.80	51.34	65.51	81.97	1.387[a]
agg	51.68	53.41	66.44	62.64	1.012

[a]Significant beyond the .10 level.

[b]Significant beyond the .005 level for one-tailed tests.

[c]Significant beyond the .025 level for one-tailed tests.

[d]Significant beyond the .050 level for one-tailed tests.

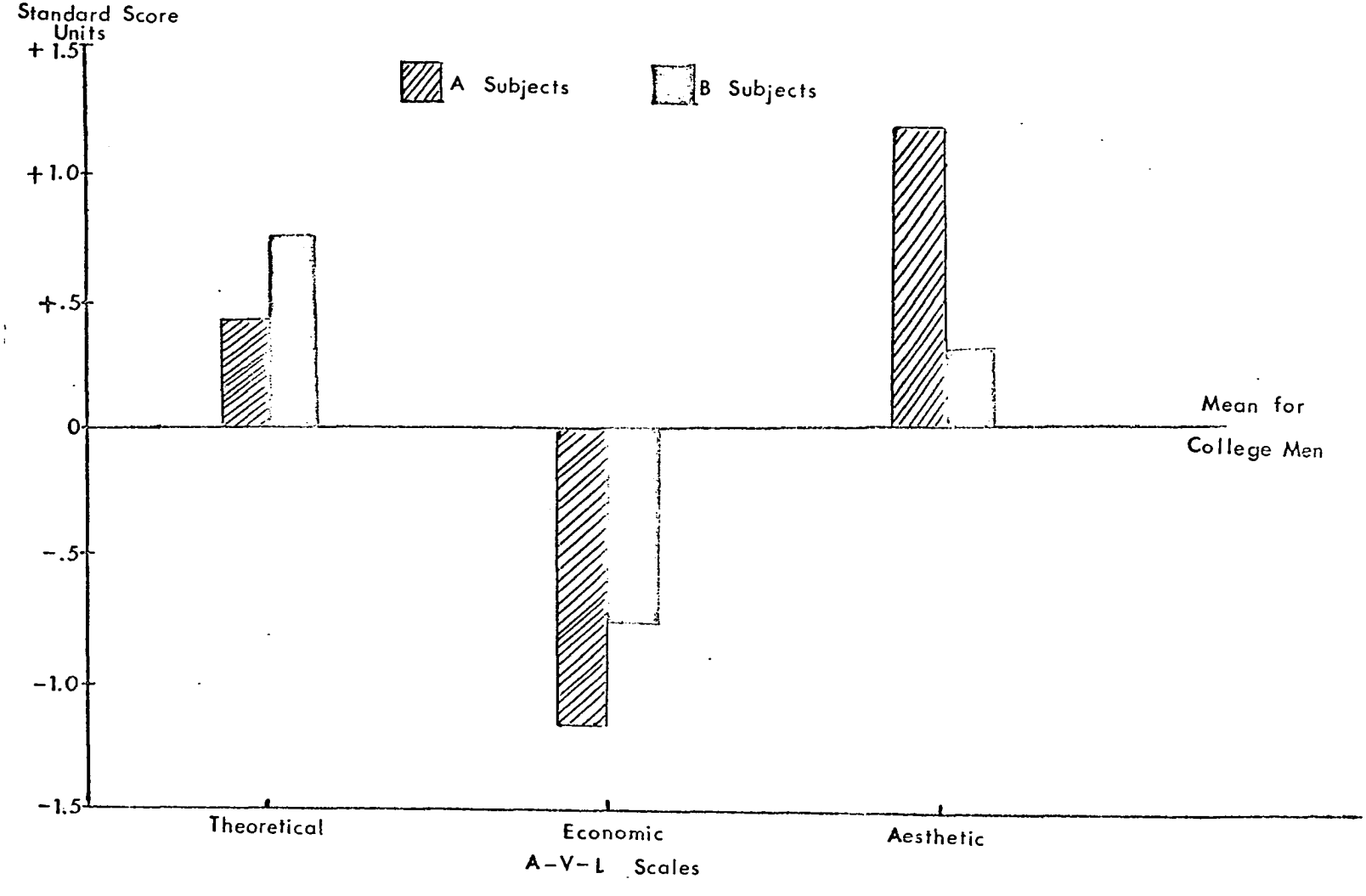

Figure 1. Profile comparing A and B subjects with college men on three scales of the Allport-Vernon-Lindzey Study of Values

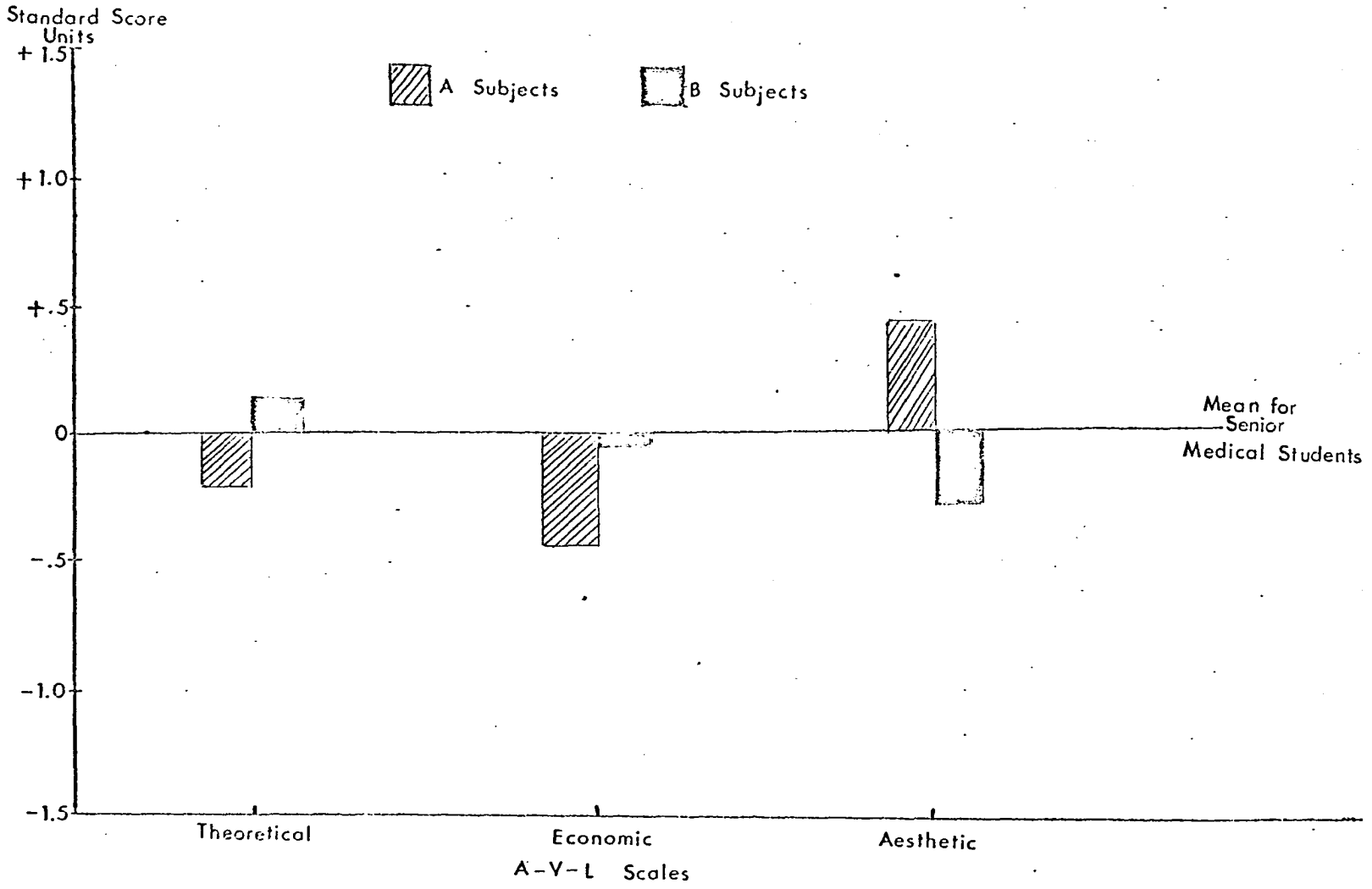

Figure 2. Profile comparing A and B subjects with senior medical students on three scales of the Allport-Vernon-Lindzey Study of Values

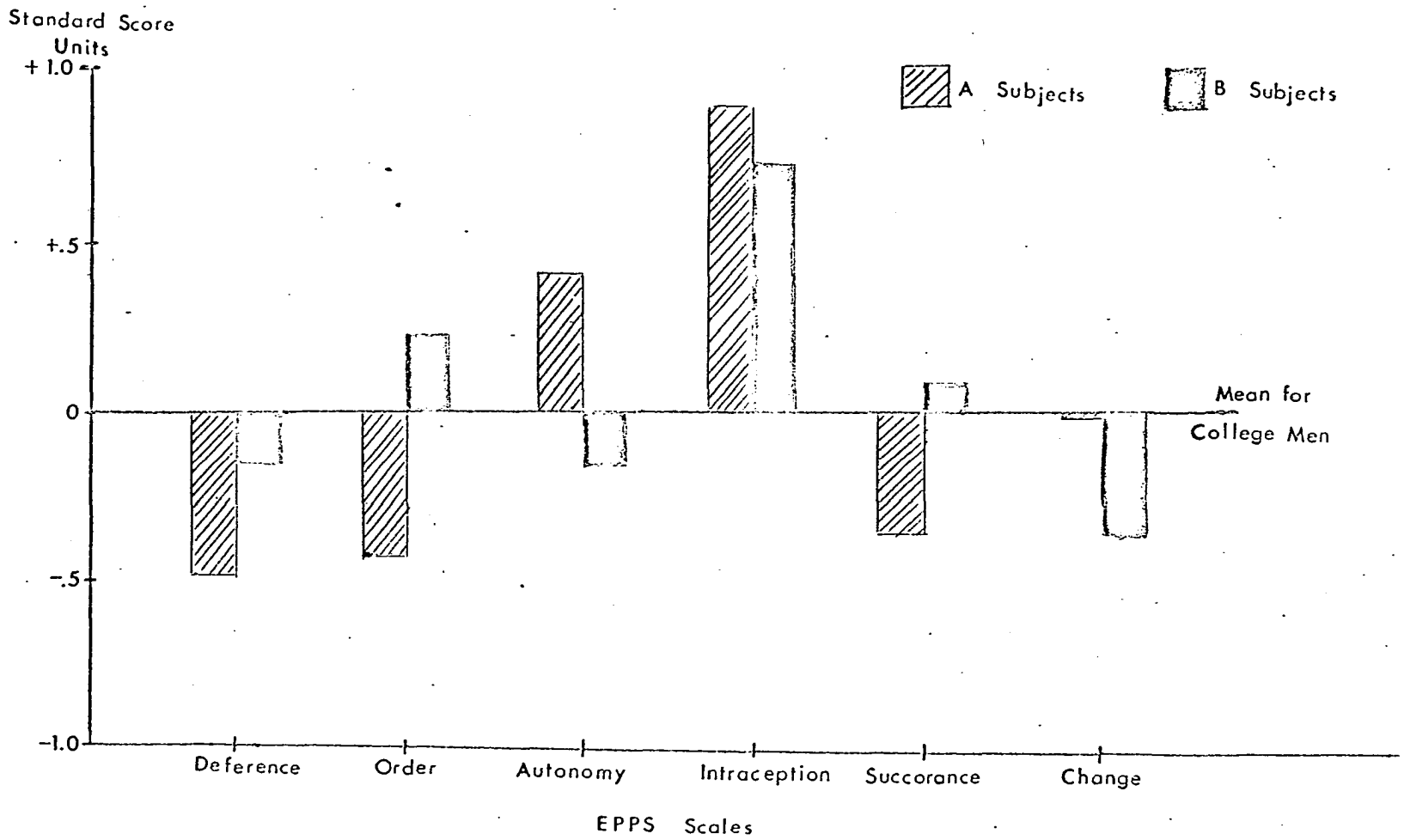

Figure 3. Profile comparing A and B subjects with college men on the Edwards Personal Preference Schedule

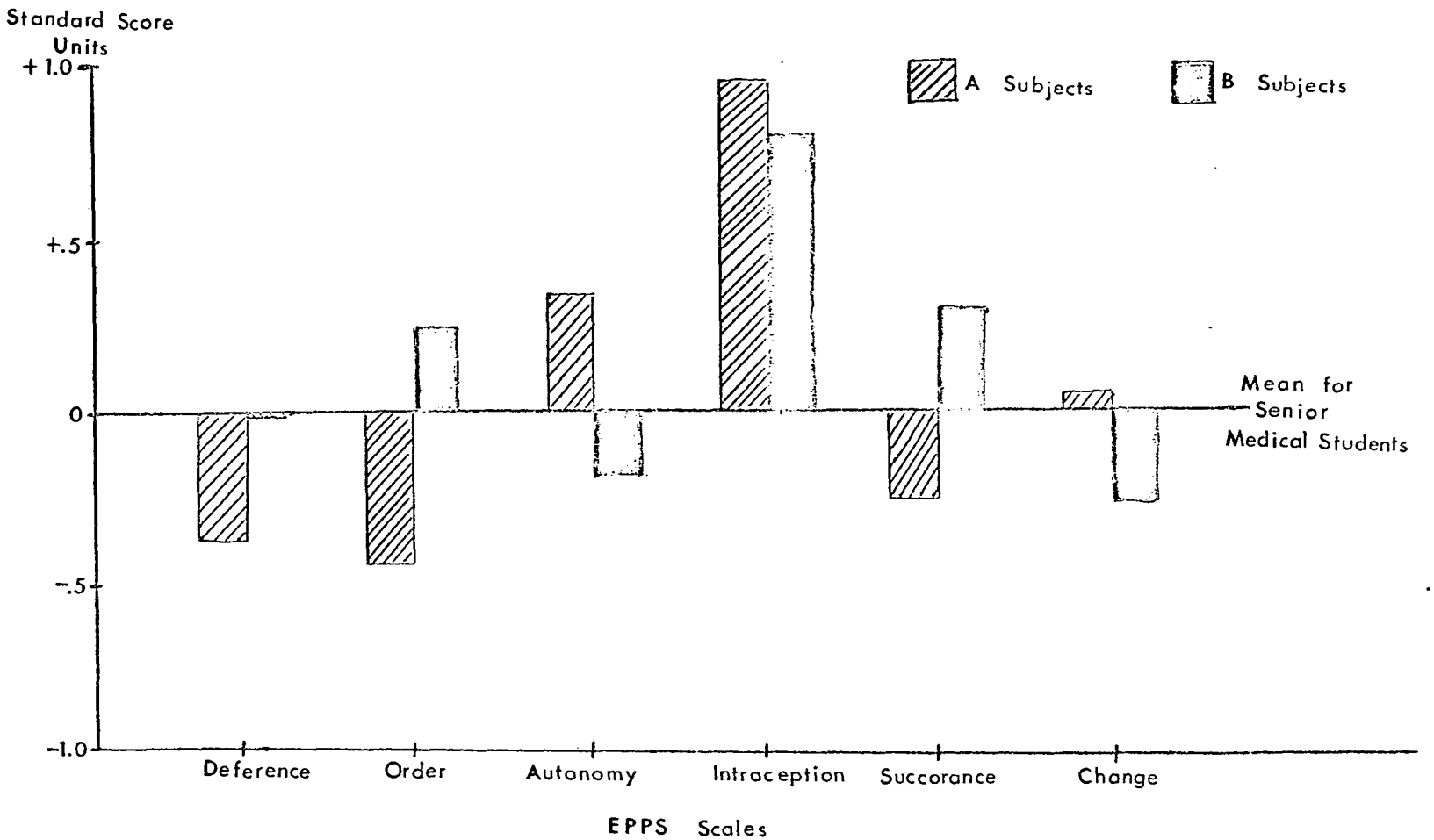

Figure 4. Profile comparing A and B subjects with senior medical students on the Edwards Personal Preference Schedule