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Cognitive Personality Types
(TITLE)

BY

Steven F. McArthur

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Master of Arts

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY CHARLESTON, ILLINOIS

1978 YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE

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IRRATIONALISM IN AFFECTIVE AND COGNITIVE PERSONALITY TYPES

BY

STEVEN F. MCARTHUR

B.A., Aquinas College, 1975

ABSTRACT OF A THESIS

Submitted in partial fulfillment of the requirements for the degree of Master of Arts at the Graduate School of Eastern Illinois University

CHARLESTON, ILLINOIS
1978

Psychologists generally consider personality to be a collection of characteristics and traits. These characteristics are manifested through two domains: affect (emotion) and cognition (thinking). Evidence has shown affect and cognition to be closely related.

Psychotherapy modalities can be categorized along a continuum, from highly rational and logical (cognitive) on one end, to highly affective on the other.

The purpose of this study was to determine the relationship between cognitively and affectively oriented persons and irrational thoughts or ideas as defined by a highly rational therapy modality (Rational-Emotive Therapy) in an effort to determine a treatment of choice for these persons.

Two instruments were used in the present study. The Myers-Briggs Type Indicator (MBTI) is a Jungian instrument consisting of four indices that determine personality type: Extraversion-Introversion, Sensation-Intuition, Judgment-Perception, and Thinking-Feeling. The Irrational Personality Trait Inventory (IPTI) is a self-report device that determines frequency and strength of irrational thoughts or ideas that a person possesses.

65 undergraduate students from Eastern Illinois University in Charleston, Illinois and Aquinas College in Grand Rapids, Michigan were administered the MBTI and IPTI. Only the first two of the three parts of the IPTI were administered because of the length involved. All of the MBTI was administered,

but only the Thinking-Feeling index was used in this study, since it was the affective/cognitive domains that were of interest.

The following hypotheses were offered: (1) A significant relationship exists between affect and irrational ideas, (2) A significant relationship exists between cognition and irrational ideas. In addition, the following null hypothesis was offered: There will be no significant differences between those subjects who prefer affective modes, as measured by the MBTI, and those who prefer cognitive modes in their frequency of irrational beliefs, as measured by the IPTI.

The MBTI and IPTI were scored for each subject. The raw scores of the Thinking scale of the MBTI were compared with the IPTI raw scores for all subjects by means of the Spearman Rank-Order Correlation test. The results indicated that a low, non-significant, negative relationship exists between the two tests. The raw scores of the Feeling scale were compared with the IPTI raw scores for all subjects by use of the Spearman. The results indicated that a low, non-significant, positive relationship exists between these two sets of scores. A t-test was made between IPTI scores for the group that was predominantly Thinking in preference and the IPTI scores for the group that was predominantly Feeling. The results of this t-test were also non-significant.

A number of possible explanations for the nature of the results were offered. These explanations involve the possible

incompatibility of the two theories used in the study, differences in operational terms used, and the use of only the verbal self-report mode for measuring emotion employed by the IPTI.

Suggestions were also offered for further experimentation and research on this issue.

The results of the study were unable to provide an answer to the original research question posed, and so were unable to point to a treatment of choice based on specific personality types.

<u>Introduction</u>

Personality theorists and research psychologists consider the collection of traits, attributes, and characteristics of individuals to be a complex personality system. For the purpose of this discussion, personality may be defined as "those enduring characteristics of the person which are significant for his <u>interpersonal</u> behavior." (Lanyon and Goodstein, 1971). One aspect of personality that is frequently used by clinical psychologists in assessment practices is the concept of personality traits—generalized response dispositions that have implications for intrapersonal and interpersonal adjustment.

Behaviorally, these characteristics are manifested through two basic domains: affect (emotion or feeling) and cognition (thinking). Affect refers to emotional states that a person experiences as a reaction or response to an event in his environment. Examples of emotional states are fear, anger, joy, depression, etc. A heightened state of emotional arousal may manifest itself in an increased heart rate, blood pressure, galvanic skin response (GSR), and rapid and shallow breathing. Other nonverbal emotional behaviors may include certain facial expressions and body movements.

Cognition refers to those abilities of reasoning and logic that are aimed at organizing and defining information about events in the environment, as well as problem solving

in response to those events. This problem solving behavior involves examining the situation and making decisions based on the assumed consequences of behaving in one manner as opposed to another. Affect is closely tied to cognition and one cannot really be separated from the other except perhaps in artificial (laboratory) settings (Rosenberg, 1970). Yet, in spite of the wide acceptance of the theory that affect and cognition are hopelessly intertwined (Schachter, 1962), clinicians and personality theorists tend to classify people according to whichever domain (cognitive or affective) seems to evidence itself more frequently or intensively to others. By this reasoning, some individuals are recognized to be stereotypically hysterical and over-emotional, while other persons are seen to be deep-thinking and overly rational or logical.

Within the past twenty years, several psychometric instruments have been developed that assess the individual's preference for processing events and information cognitively (i.e. discrimination between true and false) or affectively (i.e. discrimination between valued and not valued). The use of one of these instruments, the Myers-Briggs Type Indicator (Myers, 1962), provides evidence that cognitively-oriented and affectively-oriented individuals do exist.

Psychotherapy Orientation

Psychotherapy modalities have been categorized a number of ways. Pepinsky and Pepinsky (1954) proposed that psychotherapy, or counseling (most authors tend to make little

distinction between the two), can be divided into five major approaches: (1) trait-and-factor, (2) communications, (3) self theory, (4) psychoanalytic, and (5) neobehavioral. Patterson (1973) proposed a continuum upon which modalities of psychotherapy can be arranged, from highly rational, or cognitive, to highly affective approaches. At the cognitive end of such a continuum are those theories or approaches to therapy that are rational, logical, or intellectual in nature, such as Rational-Emotive Therapy and Reality Therapy. Further along the continuum would fall the more strictly scientific approaches, the learning theory and conditioned response theories of John Dollard and Neal Miller, Andrew Salter, and Jospeh Wolpe. Still further along would be the various analytic approaches, including Eric Berne's Transactional Analysis and traditional and neo-Freudian psychoanalytic therapy. Toward the other end of the continuum would be the self theories or phenomenological approaches, with existentialism, such as Perls Gestalt Therapy and Frankl's Logotherapy, at the most extreme end. (See Appendix A)

With evidence indicating that some individuals tend to remain cognitive or affective in their preferences for processing information (Myers, 1962), and with therapy modalities being distinguished by their domain (cognitive vs. affective) orientations, the question arises about the parallelism of the two positions. In other words, do cognitively-oriented persons find cognitive therapies more satisfactory,

and conversely, do affectively-oriented persons find affective therapies more satisfactory?

The specific purpose of this study was to investigate one aspect of that question, namely: do cognitive and affective people, as measured by the Myers-Briggs Type Indicator, differ significantly in terms of the assessment of their problems as measured in terms of a specific psychotherapy modality?

If a relationship between one's personal orientation and the orientation of a specific therapeutic modality does exist, that information could have implications for the selection of a particular modality as the treatment of choice with the appropriate individuals.

Review of Literature

Personality Types

Carl Jung (1923) was the first personality theorist to conceive of the idea of personality types. Jung described the human being as having two distinct mechanisms. One is the going out and seizing of an object, while the other is a concentration and release of energy from the object seized. These two forms of psychic energy normally alternate in the course of life. Sometimes, however, for various reasons, a person may favor one mechanism to the exclusion of the other. When this preference for one mechanism becomes chronic or patternistic, a type is produced.

Jung further described feeling as being a process that imparts to the content a definite value in the sense of

acceptance or rejection of the situation. Thinking is a psychological function which conceptualizes given situations. Jung described it as a rational function, since it arranges the representations under concepts in accordance with the presuppositions of a conscious rational norm.

Schachter and Singer (1964) proposed that cognition and affect are very closely related, even interdependent. It is their contention that a person labels, interprets, and identifies the state of physiological arousal or excitation in terms of the characteristics of the precipitating situation and his apperceptive mass. In other words, an emotional state may be considered to be a function of a state of physiological arousal and of a cognition appropriate to this state of arousal.

Based on careful research, Schachter and Singer formulated the following propositions concerning the interdependence of emotion and cognition:

- 1. Given a state of physiological arousal for which an individual has no immediate explanation, he will label this state and describe his feelings in terms of the cognitions available to him. To the extent that cognitive factors are potent determiners of emotional states, it could be anticipated that precisely the same state of physiological arousal could be labeled "joy" or "fury" or "jealousy" or any of a great diversity of emotional labels depending on the cognitive aspects of the situation.
 - 2. Given a state of physiological arousal for which an

individual has a completely appropriate explanation, no evaluative needs will arise and the individual is unlikely to label his feelings in terms of the alternative cognitions available.

3. Given the same cognitive circumstances, the individual will react emotionally or describe his feelings as emotions only to the extent that he experiences a state of physiological arousal.

Myers (1962) accounts for the existence of personality type theory by proposing that it accounts for the differences in the way that each person accepts or rejects certain elements of his environment. Essentially, the theory holds that much apparent random variation in human behavior is actually quite orderly and consistent, being caused by certain basic differences in mental functioning.

These basic differences concern the way people prefer to use their minds, specifically the way they use perception and judgment. Perception is defined here as the process of becoming aware of things or people or occurences or ideas, while judgment is defined as the process of coming-to-conclusions about what has been perceived. Together, perception and judgment thus constitute a large portion of the individual's total mental activity.

Thus, behavior is directly affected by the processes of perception and judgment, and it is entirely reasonable, according to Myers, that basic differences in perception or judgment should result in corresponding differences in behavior.

In the use of judgment, two distinct and sharply contrasting

methods become evident. One way is by the use of thinking, which is a logical process aimed at an impersonal finding. The other way is by the use of feeling, which is a process of appreciation, bestowing on things a personal subjective value.

Everyone undoubtedly makes some decisions with thinking and some with feeling. But each person is certain to like and trust one way of judging more than the other. If, when one judges these ideas, he concentrates on whether or not they are true, that is thinking-judgment. If one is conscious first of like or dislike, of whether these concepts are sympathetic or antagonistic to other ideas he prizes, that is feeling-judgment. Psychotherapy Orientation

In the comparison of various psychotherapeutic modalities, the continuum from rational approaches to existential approaches proposed by Patterson and discussed briefly in the introduction, provides us with a simple way or orienting ourselves to the premises upon which these approaches are based.

At the existential end of the continuum is Gestalt Therapy, formulated by Frederick Perls. The Gestalt point of view is the natural and undistorted approach to the wholeness of life by human beings. Perls contends that in the course of his contact with our culture, the average person allows his integrity of thinking, feeling, and acting to become fragmented. Gestalt therapy is the effort to heal patients of their dualism of being, to redevelop the unitary perception and behavior.

In his approach to therapy, Perls stressed the need for a

non-dogmatic, experimental situation. Gestaltists feel that any implicit or explicit demands on the patient are not only likely to be futile, they may possibly be damaging. The therapists present, instead, graded experiments which are designed to bring difficulties to the attention of the patient. What interferes with the accomplishment of the task becomes the focus of their work. They feel that they thus bring out the patient's resistances and help him work through them without directly challenging his defenses.

Logotherapy, developed by Viktor E. Frankl, also falls within the realm of existential psychotherapy. Logotherapy is concerned with making people conscious of their responsibility, since being responsible is an essential basis of human existence. Responsibility implies obligation, and obligation can only be understood in terms of meaning—the meaning of human life. The question of meaning is an intrinsically human one and arises in dealing with patients suffering form existential frustration or conflects. Logotherapy is thus concerned with problems involving meaning in its various aspects and realms.

Because it is concerned with existential, spiritual, or philosophical problems, logotherapy engages in discussion of these problems. The method is not an intellectual or strictly rational one, however. Logotherapy is as far removed from being a process of logical reasoning as from being merely moral exhortation.

Next along the psychotherapy continuum are the analytic approaches. Among them is Eric Berne's (1966) Transactional Analysis (TA).

TA consists of four basic operations: (1) structural analysis, (2) transactional analysis proper, (3) game analysis, and (4) script analysis.

According to TA theory, every human being has at his disposal a limited repetoire of ego states, which fall into three types. Parental ego states are borrowed from parental figures and reproduce the feelings, attitudes, behavior, and responses of those figures. Adult ego states are concerned with the autonomous collecting and processing of data and the estimating of probabilities as a basis for action. Child ego states are relics from the individual's childhood and reproduce his behavior and state of mind at a particular moment or epoch of his development, using, however, the increased facilities at his disposal as a grown-up.

Transactional analysis consists of determining which ego state is active at a given moment in the exhibition of a transactional stimulus by the agent, and which ego state is active in the responses given by the respondent.

A game is a series of ulterior transactions with a gimmick, leading to a usually well-concealed but well-defined pay-off.

Game analysis is the process of defining what games the patient is playing, and what the pay-off is for playing the game.

The script is the unconscious life plan of the individual.

It consists of decisions that the patient made in early childhood, when he was much too young to make such serious commitments. These decisions remain unconscious, and choices of partners and action are rationalized on grounds which are actually irrelevant since the chief function of partners is to play roles in the protagonist's script. The ultimate goal of human behavior is to bring about the desired culmination of the script, which may be either tragic or constructive.

Since most individuals are familiar with the concepts of Freudian psychoanalysis, it is not necessary to provide a detailed explanation of them here.

Further along the continuum is the theory of reciprocal inhibition, formulated by Joseph Wolpe. From his early clinical research in neurotic behavior in animals, Wolpe concluded the following principle: If a response opposed to anxiety can be made to take place in the presence of anxiety-evoking stimuli so that a complete or partial suppression of the anxiety response is effected, the bond between these stimuli and the anxiety response will be weakened.

One of the purposes of psychotherapy is to remove neurotic reactions or behavior. This is accomplished by applying the reciprocal inhibition principle. Wolpe reasons that parasympathetic nervous system responses would be most incompatible with the sympathetic responses of anxiety. He uses mainly assertive, sexual, and relaxation responses, although he has tried other kinds of responses. Experiences of the client which

have led him to his present sensitivities are pointed out to him when possible, and, if not, he is told that it is not necessary to know these connections. He is told that measures to break down his anxious habits will be applied in his life situation, and in the interviews, and that the essence of these methods is to oppose to the anxiety other emotional states incompatible with it.

A learning theory approach to therapy is the conditioned reflex therapy proposed by Andrew Salter (1949). Conditioned reflex therapy is based on laboratory experiments with animals and children. The basic nature of the conditioned reflex is illustrated by Pavlov's work with dogs. By ringing a bell just before presenting a hungry dog with a piece of meat, Pavlov associated, or conditioned, the dog's flow of saliva with the sound of the bell.

According to Salter's theory, conditioning occurs without awareness, as does generalization of the conditioned response.

All learned behavior is, then, a result of conditioning, including emotional reactions (physiological and autonomic) as well as motor behavior and verbal behavior.

John Dollard and Neal Miller (1950) proposed another learning theory approach known as reinforcement theory.

In terms of Dollard's and Miller's theory, the neurotic is unable to resolve his conflicts because he is not clearly aware of them. They are repressed, that is, they are unlabeled, and he has no language to describe the conflicting forces within

him. Although the neurotic's symptoms cause him to suffer, they actually reduce his conflict. When a successful symptom occurs, it is reinforced because it reduces neurotic misery. The symptom is thus learned as a habit.

At the extreme rational, logical end of the psychotherapy continuum is Rational-Emotive Therapy. Rational-Emotive Therapy (RET) was developed by Albert Ellis in about 1954, largely as the result of his frustrations with the use of psychoanalysis and other analytic modalities (notably Adlerian) in marital counseling.

Rational-Emotive psychotherapy is a modality which attempts to modify irrational belief systems or attitudes which consequently stimulate inappropriate responses to otherwise neutral environmental events. It is based on the assumption that what we label our emotional reactions are mainly caused by our conscious and unconscious evaluations, interpretations, and philosophies. Or, put another way, continuing states of emotional disturbance, being the result of self-verbalizations, are determined, not the external circumstances or events, but by the perceptions and attitudes toward these events that are incorporated in the internalized sentences about them. Human thinking, then, is a basic cause of emotion, and healthy and unhealthy emotional reactions are significantly affected by changes in a person's cognitions.

There is also general agreement among Rational-Emotive therapists that most, if not all, psychological problems are

the result of emotional states and reactions. Emotional or psychological disturbance—neurotic behavior—is a result of irrational and illogical thinking. Emotion accompanies thinking and is, in effect, biased, prejudiced, highly personalized irrational thinking.

Ellis (19.2) spoke of the basic premise of RET being that much, if not all, neurotic behvior is due to the irrational way in which people construe their world, and to the faulty philosophical assumptions they make which lead to self-defeating self statements or internal sentences.

Treatment, following these theories, involves reorganizing perceptions and thinking so that thinking becomes logical and rational rather than illogical and irrational. The goal of psychotherapy is thus seen as being the demonstration to the patient that his self-verbalizations have been the source of his emotional disturbance, to show that these self-verbalizations are illogical and irrational, and to reorganize his thinking so that his self-verbalizations become more logical and efficient and so are not associated with negative emotions and self-defeating behavior.

The following diagram schematically represents the RET paradigm:

- A: The activating stimulus
- B: The belief system--either rational or irrational
- C: The rational consequences of rational beliefs or irrational consequences of irrational beliefs

- D: Disputing the irrational beliefs
- E: Experiencing the effects of disputing the irrational beliefs, including both the cognitive effects and behavioral effects

 The following list is a brief summation of what Ellis considers to be the irrational beliefs that cause people to experience emotional difficulties:
- 1. It is essential that one be loved or approved by virtually everyone in his community.
- 2. One must be perfectly competent, adequate, or achieving to consider oneself worthwhile.
- 3. Some people are bad, wicked, or villanous and therefore should be blamed and punished.
- 4. It is a terrible catastrophe when things are not as one wents them to be.
- 5. Unhappiness is caused by outside circumstances, and the individual has no control over it.
- 6. Dangerous or fearsome things are causes for great concern and their possibility must be continually dwelt upon.
- 7. It is easier to avoid certain difficulties and self-responsibilities than to face them.
- 8. One should be dependent upon others and must have someone stronger on whom to rely.
- 9. Past experiences and events are the determiners of present behavior; the influence of the past cannot be eradicated.
- 10. One should be quite upset over other people's problems and disturbances.

- 11. There is always a right and perfect solution to every problem, and it must be found or the results will be catastrophic.

 Cognition/Affect Measurement
- If, in fact, there are differences in the methods that people prefer to use to organize information in their environment (i.e. cognitively vs. affectively), these differences could imply differences in the choice of treatment. The first step involved in such an undertaking is distinguishing between cognitively-oriented and affectively-oriented persons. One instrument that is suited to the task is the Myers-Briggs Type Indicator (MBTI), which was developed by Isabel Briggs Myers and Katherine C. Briggs in 1947.

The MBTI is a self-report device which contains separate indices for determining each of four basic preferences, which according to Jung's type theory discussed earlier, structure the individual's personality.

The Extraversion-Introversion (EI) index is designed to reflect whether a person is an extravert or an introvert. The extravert is oriented primarily to the outer world, and thus tends to focus his perception and judgment upon people and things. The introvert is oriented primarily to the inner world postulated in Jungian theory, and thus tends to focus his perception and judgment upon concepts and ideas.

The Sensation-Intuition (SN) index is designed to reflect the person's preference as between two opposite ways of perceiving, i.e., whether he relies primarily on the familiar process of sensing, by which he is made aware of things directly through one or more of his five senses, or primarily on the less obvious process of intuition, which is understood as indirect perception by way of the unconscious, with emphasis on ideas or associations which the unconscious tacks on to the outside things perceived.

The Judgment-Perception (JP) index is designed to reflect whether a person relies primarily upon a judging process or upon a perceptive process in his dealings with the outside world, that is, in the extraverted part of his life.

The Thinking-Feeling (TF) index is designed to reflect the person's preference as between two opposite ways of judging, i.e., whether he relies primarily upon thinking, which discriminates impersonally between true and false, or primarily upon feeling, which discriminates between valued and not valued.

The main purpose of the MBTI is to acertain a person's basic preferences. EI, SN, JP, and TF are therefore designed to point one way or the other, rather than scales designed to measure traits per se. What each of the four indices is intended to reflect is a habitual choice between opposites, analogous to right- or left-handedness. Thus, TF means Thinking or Feeling, rather than Thinking to Feeling.

The division of each index into two separate scales emphasizes the respectful recognition which type theory accords to opposite kinds of people. Each person is classified in positive terms, by what he likes, not what he lacks. The theory attaches no a priori value judgment to one preference as compared

to another, but considers each one valuable and at times indispensable in its own field.

Myers (1962) has reported that psychotherapists may find the type concepts useful in the relatively non-threatening context of the preferences, for helping the patient to see the impossibility of the demands he has been making upon himself, and to recognize and strive for the strengths compatible with his own personality type and goals which are therefore attainable.

The actual structure of the MBTI, as well as other instruments used in the present study, will be described in the Methods section.

Statement of Problem and Hypotheses

Because the literature suggests that cognition and affect are closely related, even interdependent, and that emotion accompanies thinking and is, in effect, the result of highly personalized irrational thinking, it would be valuable to further understand how individuals who prefer cognitive vs. those who prefer affective modes differ in their frequency of irrational thinking (irrationalism).

Therefore, the following hypotheses are offered:

- 1. A significant relationship exists between irrational ideas and affect.
- 2. A significant relationship exists between irrational ideas and cognition.

Further, the following null hypothesis is offered:

3. There will be no significant differences between those subjects who prefer affective modes, as measured by the MBTI, and those who prefer cognitive modes in their frequency of irrational beliefs, as measured by the IPTI.

Method

Subjects

69 subjects were used in the present study. All were undergraduate student volunteers from either Eastern Illinois University in Charleston, Illinois, or Aquinas College in Grand Rapids, Michigan. Subjects were those students who made voluntary positive responses to notices distributed in the psychology department and University dormitories. Additional volunteers were obtained as a result of announcements made by the author in a number of introductory and lower-level undergraduate psychology courses at EIU and Aquinas College.

Although no controls were made for age and sex, all S's were underclassmen, with the majority (68%) being freshmen and sophomores. Lower-level undergraduate students were preferred to upperclassmen in order to reduce, although not entirely eliminate, the chances that they had previously been exposed to the basic concepts of RET or similar types of cognitive restructuring theory. No academic department affiliation was deliberately excluded from the population sample. The hoped-for benefit of this selection process was that the subject population would more closely resemble the population-at-large in terms of their knowledge of cognitive psychology.

Although the subjects were not told in advance of the exact nature of the study in which they were participating, they were assured by the author that there would be no "tricks"

or gimmicks of any kind involved. They were also assured that the identifying information required of each subject would be held in strict confidence by the author. All of the students who served as subjects were also informed that they could receive the results of their own tests by contacting the author in writing. Finally, all subjects who were students at Aquinas College, in keeping with department regulations concerning research, were required to sign permission slips, indicating their willingness to participate in the study. (See Appendix B)

Of the 65 students whose test scores were valid, 41 were females and 24 were males. They ranged in age from 17 to 54 years (mean age = 20.1 yrs.; SD = 2.13). Students' class distribution was as follows: 41 freshmen, 13 sophomores, six juniors, and five seniors. Declared majors were psychology, business, and English.

Instruments

Myers-Briggs Type Indicator (MBTI). The MBTI is a selfreport device consisting of 166 statements. Each statement has from two to five possible responses, requiring the subject to indicate on a separate answer sheet, the response that best describes him or his actions. Below are two examples of the items found on the MBTI:

When an attractive chance for leadership comes to you, do you (A) accept it if it is something you can really swing, or (B) sometimes let it slip because you are too

modest about your own abilities, (C) or doesn't leadership ever attract you?

In solving a personal problem, do you (A) feel more confident about it if you have asked other people's advice, or (B) feel that nobody else is in as good a position to judge as you are? (See Appendix C)

Scoring a Type Indicator produces four preference scores, one for each of the four indices: EI, SN, JP, and TF. Each index reflects one of the four preferences, which, according to theory, determine type. The score for each index consists of a letter showing the direction of the preference the testee reported (e.g., E or I), followed by a number indicating its reported strength.

For each of the four indices, two keys are required. For example, the score for EI is obtained by determining the points for E and the points for I separately. The MBTI is not an ipsative test in the sense that indicating a positive response for a particular preference (e.g., Thinking) on an item does not indicate a negative response for the other preference being measured in that index (Feeling). Thus, the eight possible raw scores (two for each scale) are independent of each other. In other words, each of the two preferences in an index is determined on separate test items.

Of the two values thus obtained by scoring an index, the greater number indicates the direction of the preference. To complete the scoring, the smaller number is subtracted from

the greater, and the preference score corresponding to that difference is obtained from a transformation chart. (See Appendix D)

Since only the cognitive/affective aspect of an individual's personality was of primary interest, only the TF scores were observed; however, each subject did complete the entire MBTI.

Irrational Personality Trait Inventory (IPTI). The second instrument used in the present study was the Irrational Personality Trait Inventory developed by Maxie C. Maultsby in 1971 and published as part of his Handbook of Rational Self-Counseling. It is a self-report device which contains the 179 most common irrational personality traits which account for unhappiness in the daily lives of normal people.

According to Maultsby (1971), the Inventory has five unique features: (A) It is based on an operational concept of motivation and a research-tested concept of an emotion; (B) It is consistent with the demonstrated facts of human anatomy and psychophysiology; (C) Because it is not a psychological test, it does not require the expense or time of a mental health professional to administer or interpret it; (D) It is a habit or trait checklist designed for rapid self-assessment by lay people of average intelligence; (E) The information it supplies can readily be applied by those lay people in their daily lives to diminish their "unhappiness habits."

Maultsby developed the IPTI after five years of clinical testing. In spite of that, there seems to be little in the way of experimental verification of the instrument's validity or reliability. Still, the IPTI does have face validity, and in the absence of other similar measurement devices, it appears to be the best instrument available for the present task.

The IPTI is divided into three sections: The common perception inventory, consisting of 29 statements which are perceptions or observations which most people in our society sometimes make about themselves; the common belief inventory, containing 41 statements which most people hold to some degree; and the common trait inventory, which is a list of 67 traits or habits typical of many people.

The actual structure of each of the sections is virtually the same. In each, there is a statement describing a common perception, belief, or trait followed by a five point scale by which the subject can estimate the amount of time that he feels that way. Headings for the estimate ranges are "never", "sometimes" (1-25%), "as often as not" (about 50%), "frequently" (about 75%), and "usually", or headings similar. (See Appendix E)

Because of the relative length of both the MBTI and the IPTI, and because the purpose of the study was to investigate the common perceptions and beliefs of the subjects and not necessarily the traits (in keeping with both the theories of RET and Jung's typology), a decision was made to delete the

last portion of the IPTI.

In the present study, on the IPTI, a subject was considered to possess a particular perception or belief if he estimated the amount of time he agreed with the statement as being at least 50% of the time. Each subject's score was the number of irrational beliefs or perceptions that he reported to possess (the total range of scores possible was 0-70, the number of statements in the first two sections of the Inventory).

Procedure

Students participating in the study were tested in eight groups ranging in size from four to 15. Instructions for completing both instruments were read to the group by the author, and the subjects were allowed to complete these at their own pace. As soon as everyone in the group had finished and turned in the instruments, an explanation as to the exact nature of the study was given, along with information on how to receive one's own test scores.

The instruments were then scored in accordance with the given instructions. Each subject's total score consisted of a letter (T or F), indicating the direction of that person's preference on the MBTI, followed by a number indicating the strength of the preference, and finally a number indicating the subject's score on the IPTI.

Results

Data Analyses

Appendix F contains the breakdown of individual scores

rank-ordered into two columns: (1) the Thinking response and (2) the Feeling response on the MBTI. Each MBTI score is followed by its corresponding score on the IPTI. (See Appendix F)

By observing the raw scores on the MBTI and the score on the IPTI for the entire subject population, these data were subjected to a Spearman Rank-Order Correlation test. In comparing the Thinking scores of all the subjects with their IPTI scores, the results indicate that a low, non-significant, negative relationship exists between the two tests, Rho = -.22.

In the comparison of the Feeling scores of all subjects With their IPTI scores by use of the Spearman, the results indicate a low, non-significant, positive relationship between the two tests, Rho = .31.

A final analysis of the data involved a \underline{t} -test for significance between the IPTI scores for the Thinking group and the IPTI scores for the Feeling group, $\underline{t}(65) = .6165$, $\underline{p} < .05$, which was not significant.

Discussion

The statistical analyses of the data generated in the present study indicated that no significant differences were shown to exist in irrationalism between the group categorized as Thinking and the group categorized as Feeling, nor was there a significant relationship between Thinking or Feeling scores and IPTI scores. Although a negative, non-significant correlation did exist between Thinking scores and IPTI scores, and a positive, non-significant correlation between Feeling scores and IPTI scores, these correlations were relatively low, and so do not easily lend themselves to supporting the experimental hypotheses, which proposed that significant differences or relationships would be observed.

The exact nature of the reason or reasons that the results indicated a lack of a relationship between MBTI Thinking and Feeling scores, and IPTI scores is not immediately identifiable from the statistical snalyses of the data. This is not to say that the analyses were necessarily inadequate for the data; they were designed to indicate the strength of the relation—ship between the two instruments, not the cause nor the reasons for the results. With that in mind, there still remain a number of possible causes for the results which will be discussed.

One possible explanation for the nature of the results involves the issue of compatibility of the two theoretical systems that were the basis of the study. Jung spent his early career as a disciple of Freud and his developing psy-

choanalytic approach to psychotherapy and personality. Even after he broke with Freud and began conceptualizing his own theoretical framework in 1914, Freud's influence remained strong, and Jung's theory is generally considered to be analytic in nature (Hall and Lindzey, 1970). It is from Jung that the notions of thinking and feeling (and sensing and intuiting as well) as psychological functions come into being. The MBTI is a Jungian instrument.

Ellis too began his professional career using what was essentially Freudian psychoanalysis (although he also employed Adlerian therapy). When he abandoned these methods in the late 1950's and formulated his own theoretical system (RET). he abandoned not only the specific theories, but the entire concept of traditional analysis as well (1.e., the notions that (1) there are innate characteristics that appear in most, if not all, individuals, and (2) it is necessary to investigate an individual's early development in order to successfully deal with present problems). RET focuses not on what an individual was exposed to between birth and age five, but rather on what is happening with the person in the here-and-now. Further, in opposition to the concept of innate characteristics, Ellis concentrates on one's covert behavior: The non-verbal irrational messages that an individual gives himself in direct response to some activating stimulus in the environment.

It is entirely possible that these two theories, by virtue of their differences in theoretical assumptions, are incom-

patible, at least to the extent that the measurement instruments have or do not have construct validity, and therefore, the relationship between the two is poor.

A second explanation for the nature of the results is similar to the one just discussed, but involves differences in the operational definitions of terms used in the two theories. The problem here lies in the use of the concepts of "rationality" and "irrationality."

Jung states that a rational function is one which makes use of reason, judgment, abstraction, and generalization. Thinking and Feeling are both rational functions. Sensation and Intuition are, in contrast, irrational functions because they are based on the perception of the concrete, particular, and accidental.

Ellis approaches these two concepts in a different manner. An irrational statement is one that is self-defeating, and may be generalized over a number of specific situations, whereas a rational statement is one that is realistic, constructive, logical, and can be readily tested in the environment and found to be true. Both rational and irrational beliefs make use of judgment (albeit sometimes poor judgment), abstraction, and generalization (the shift from a specific incident to an all-encompassing philosophy or belief), as well as perception of the concrete, particular, and accidental.

By use of Jung's definitions, every person is rational by virtue of having preferences for Thinking or Feeling, which

are both rational functions; and, conversely, irrational by virtue of having preferences for sensing or intuiting, which are irrational functions. By Ellis' definitions of rational and irrational, the two may have nothing to do with cognition or affect, since it is the nature of the internal cognitive message (rational and constructive or irrational and selfdefeating) that is the determiner of the emotional (affective) state (rational beliefs lead to appropriate emotion, while irrational beliefs lead to inappropriate emotion). What may have happened then, was that the MBTI did not and could not properly distinguish two separate groups of individuals, as they could be defined by the IPTI.

The work of Schachter (Schachter and Singer, 1962; Schachter and Latane, 1964) on the interaction of cognitive and physiological determinants of emotional states should be considered at this point. Schachter proposed that emotional states (physiological arousal) are labeled as emotions, and are labeled as such by use of one's cognitive processes, based on past experience in similar kinds of situations. He also proposed that some people are more skilled at the cognitive process of labeling emotion than are others. If this is true, and the statements on the IPTI are seen as descriptions of emotions, there should have been some relationship between a number of rational or irrational cognitions used in the state or trait anxiety and individual subjective experiences. Perhaps further assessment into the relationship of these

cognitive self-statements and the specific components of anxiety would be more fruitful than an overall self-report of anxiety.

Borkovec (1977) suggests that affect may in fact be compared to three modalities: behavior, verbal self-report and cognition, and physiological arousal. Perhaps more would be gained by assessing all three modes rather than the single, verbal self-report mode the IPTI uses.

What is needed to resolve the issue of whether there are significant differences in the number of irrational beliefs professed by two groups of individuals who can be said to have consistent differences in some aspect of personality, or whether there are significant relationships between the processes of thinking or feeling vs. irrationalism is a tighter experimental design which would include the following:

- (1) Standardization of terms (operational definitions) impoortant to the thrust of the experimental hypothesis, which would indicate the use of instruments stemming from the same or very similar theoretical assumptions.
- (2) An experimental population broad enough to realistically reflect the true population—at—large, rather than the narrowly defined population used in the present study.
- (3) An assessment of the various components of affect which may be associated with the subjects and other variables.

It would also be valuable to have a clearer understanding of the relationship between cognition and affect (such as proposed by Schachter) that could be more easily applied to

the concept of irrationalism.

Conclusion

Although the results obtained in the present study remain inconclusive, there is no lack of scientific knowledge to be gained. The circumstances by which a Jungian personality device was used to determine modes of operation as defined by what is essentially a behavioral approach to personality points to the lack of scientifically sound instruments by which one may measure the validity of these behavioral theories. Clearly, more careful scientific research needs to be done.

Although this study could shed no conclusive light on the original question, i.e., can one determine a treatment of choice in therapy based upon knowledge of one or more aspects of the patient's personality, it has opened this whole area of inquiry to closer inspection for the future.

APPENDIX A

A Continuum of Psychotherapy Modalities

EXISTENTIAL

Gestalt Therapy (Perls)

Logotherapy (Frankl)

Transactional Analysis (Berne)

Psychoanalysis (Freud)

Reciprocal Inhibition (Wolpe)

Conditioned Reflex Therapy (Salter)

Reinforcement Theory (Dollard & Miller)

Reality Therapy (Glasser)

Rational-Emotive Therapy (Ellis)

RATIONAL

Appendix B

AGREEMENT TO PARTICIPATE IN A PSYCHOLOGICAL EXPERIMENT

I agree to participate in a psychological experiment conducted by Steven McArthur as part of his research for his Master's thesis. I understand that complete information of all features of the experiment that reasonably might be expected to influence my willingness to participate will be explained to me before the experiment; or, if some concealment is necessary, that I will be told this and then given a complete explanation after the experiment. I further understand that participation involves no risk of physical or mental discomfort, harm, or danger. A copy of the results of the completed experiment will be made available for my inspection if I so request.

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Note: If the participant is a minor, this agreement must be signed by a parent, guardian, school officer, or other adult who holds responsibility for the minor.

Name of Minor	加州 在1986年的成本的基础。1984年最初
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MIXERS-BRIGGS TYPE INIDICATOR

FORM F

by Katharine C. Briggs and Isabel Briggs Myers

DIRECTIONS:

There are no "right" or "wrong" answers to these questions. Your answers will help show how you like to look at things and how you like to go about deciding things. Knowing your own preferences and learning about other people's can help you understand where your special strengths are, what kinds of work you might enjoy and be successful doing, and how people with different preferences can relate to each other and be valuable to society.

Read each question carefully and mark your answer on the separate answer sheet. Make no marks on the question booklet. Do not think too long about any question. If you cannot decide on a question, skip it but be careful that the next space you mark on the answer sheet has the same number as the question you are then answering.

Read the directions on your answer sheet, fill in your name and any other facts asked for, and work through until you have answered all the questions.



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- 1. Does following a schedule
 - (A) appeal to you, or
 - (B) cramp you?

- 2. Do you usually get along better with
 - (A) imaginative people, or
 - (B) realistic people?
- 3. If strangers are staring at you in a crowd, do you
 - (A) often become aware of it, or
 - (B) seldom notice it?
- 4. Are you more careful about
 - (A) people's feelings, or
 - (B) their rights?
- 5. Are you
 - (A) inclined to enjoy deciding things, or
 - (B) just as glad to have circumstances decide a matter for you?
- 6. When you are with a group of people, would you usually rather
 - (A) join in the talk of the group, or
 - (B) talk individually with people you know well?
- 7. When you have more knowledge or skill in something than the people around you, is it more satisfying
 - (A) to guard your superior knowledge, or
 - (B) to share it with those who want to learn?
- 8. When you have done all you can to remedy a troublesome situation, are you
 - (A) able to stop worrying about it, or
 - (B) still more or less haunted by it?
- If you were asked on a Saturday morning what you were going to do that day, would you
 - (A) be able to tell pretty well, or
 - (B) list twice too many things, or
 - (C) have to wait and see?

- 10. Do you think on the whole that
 - (A) children have the best of it, or
 - (B) life is more interesting for grown-ups?
- 11. In doing something that many other people do, does it appeal to you more to
 - (A) do it in the accepted way, or
 - (B) invent a way of your own?
- 12. When you were small, did you
 - (A) feel sure of your parents' love and devotion to you, or
 - (B) feel that they admired and approved of some other child more than they did of you?
- 13. Do you
 - (A) rather prefer to do things at the last minute, or
 - (B) find that hard on the nerves?
- 14. If a breakdown or mix-up halted a job on which you and a lot of others were working, would your impulse be to
 - (A) enjoy the breathing spell, or
 - (B) look for some part of the work where you could still make progress, or
 - (C) join the "trouble-shooters" who were wrestling with the difficulty?
- 15. Do you usually
 - (A) show your feelings freely, or
 - (B) keep your feelings to yourself?
- 16. When you have decided upon a course of action, do you
 - (A) reconsider it if unforeseen disadvantages are pointed out to you, or
 - (B) usually put it through to a finish, however it may inconvenience yourself and others?
- 17. In reading for pleasure, do you
 - (A) enjoy odd or original ways of saying things, or
 - (B) like writers to say exactly what they mean?

- 18. In any of the ordinary emergencies of everyday life, do you prefer to
 - (A) take orders and be helpful, or
 - (B) give orders and be responsible?
- 19. At parties, do you
 - (A) sometimes get bored, or
 - (B) always have fun?
- 20. Is it harder for you to adapt to
 - (A) routine, or
 - (B) constant change?
- 21. Would you be more willing to take on a heavy load of extra work for the sake of
 - (A) extra comforts and luxuries, or
 - (B) a chance to achieve something important?
- 22. Are the things you plan or undertake
 - (A) almost always things you can finish, or
 - (B) often things that prove too difficult to carry through?
- 23. Are you more attracted to
 - (A) a person with a quick and brilliant mind, or
 - (B) a practical person with a lot of common sense?
- 24. Do you find people in general
 - (A) slow to appreciate and accept ideas not their own, or
 - (B) reasonably open-minded?
- 25. When you have to meet strangers, do you find it
 - (A) pleasant, or at least easy, or
 - (B) something that takes a good deal of effort?
- 26. Are you inclined to
 - (A) value sentiment more than logic, or
 - (B) value logic more than sentiment?
- 27. Do you prefer to
 - (A) arrange dates, parties, etc. well in advance, or
 - (B) be free to do whatever looks like fun when the time comes?
- 28. In making plans which concern other people, do you prefer to
 - (A) take them into your confidence, or
 - (B) keep them in the dark until the last possible moment?

- 29. Is it a higher compliment to be called
 - (A) a person of real feeling, or
 - (B) a consistently reasonable person?
- 30. When you have a decision to make, do you usually
 - (A) make it right away, or
 - (B) wait as long as you reasonably can before deciding?
- 31. When you run into an unexpected difficulty in something you are doing, do you feel it to be
 - (A) a piece of bad luck, or
 - (B) a nuisance, or
 - (C) all in the day's work?
- 32. Do you almost always
 - (A) enjoy the present moment and make the most of it, or
 - (B) feel that something just ahead is more important?
- 33. Are you
 - (A) easy to get to know, or
 - (B) hard to get to know?
- 34. With most of the people you know, do you
 - (A) feel that they mean what they say, or
 - (B) feel you must watch for a hidden meaning?
- 35. When you start a big project that is due in a week, do you
 - (A) take time to list the separate things to be done and the order of doing them, or
 - (B) plunge in?
- 36. In solving a personal problem, do you
 - (A) feel more confident about it if you have asked other people's advice, or
 - (B) feel that nobody else is in as good a position to judge as you are?
- 37. Do you admire more the people who are
 - (A) conventional enough never to make themselves conspicuous, or
 - (B) too original and individual to care whether they are conspicuous or not?
- 38. Which mistake would be more natural for you:
 - (A) to drift from one thing to another all your life, or
 - (B) to stay in a rut that didn't suit you?

- 39. When you run across people who are mistaken in their beliefs, do you feel that
 - (A) it is your duty to set them right, or
 - (B) it is their privilege to be wrong?
- 40. When an attractive chance for leadership comes to you, do you
 - (A) accept it if it is something you can really swing, or
 - (B) sometimes let it slip because you are too modest about your own abilities,
 - (C) or doesn't leadership ever attract you?
- 41. Among your friends, are you
 - (A) one of the last to hear what is going on, or
 - (B) full of news about everybody?
- 42. Are you at your best
 - (A) when dealing with the unexpected, or
 - (B) when following a carefully workedout plan?
- 43. Does the importance of doing well on a test make it generally
 - (A) easier for you to concentrate and do your best, or
 - (B) harder for you to concentrate and do yourself justice?
- 44. In your free hours, do you
 - (A) very much enjoy stopping somewhere for refreshments, or
 - (B) usually want to use the time and money another way?
- 45. At the time in your life when things piled up on you the worst, did you find
 - (A) that you had gotten into an impossible situation, or
 - (B) that by doing only the necessary things you could work your way out?
- 46. Do most of the people you know
 - (A) take their fair share of praise and blame, or
 - (B) grab all the credit they can but shift any blame on to someone else?
- 47. When you are in an embarrassing spot, do you usually
 - (A) change the subject, or
 - (B) turn it into a joke, or
 - (C) days later, think of what you should have said?

- 48. Are such emotional "ups and downs" as you may feel
 - (A) very marked, or
 - (B) rather moderate?
- 49. Do you think that having a daily routine is
 - (A) a comfortable way to get things done, or
 - (B) painful even when necessary?
- 50. Are you usually
 - (A) a "good mixer", or
 - (B) rather quiet and reserved?
- 51. In your early childhood (at six or eight), did you
 - (A) feel your parents were very wise people who should be obeyed, or
 - (B) find their authority irksome and escape it when possible?
- 52. When you have a suggestion that ought to be made at a meeting, do you
 - (A) stand up and make it as a matter of course, or
 - (B) hesitate to do so?
- 53. Do you get more annoyed at
 - (A) fancy theories, or
 - (B) people who don't like theories?
- 54. When you are helping in a group undertaking, are you more often struck by
 - (A) the cooperation, or
 - (B) the inefficiency,
 - (C) or don't you get involved in group undertakings?
- 55. When you go somewhere for the day, would you rather
 - (A) plan what you will do and when, or
 - (B) just go?
- 56. Are the things you worry about
 - (A) often really not worth it, or
 - (B) always more or less serious?
- 57. In deciding something important, do you
 - (A) find you can trust your feeling about what is best to do, or
 - (B) think you should do the *logical* thing no matter how you feel about it?

- 58. Do you tend to have
 - (A) deep friendships with a very few people, or
 - (B) broad friendships with many different people?
- 59. Do you think your friends
 - (A) feel you are open to suggestions, or
 - (B) know better than to try to talk you out of anything you've decided to do?
- 60. Does the idea of making a list of what you should get done over a week-end
 - (A) appeal to you, or
 - (B) leave you cold, or
 - (C) positively depress you?
- 61. In traveling, would you rather go
 - (A) with a companion who had made the trip before and "knew the ropes", or
 - (B) alone or with someone greener at it than yourself?
- 62. Would you rather have
 - (A) an opportunity that may lead to bigger things, or
 - (B) an experience that you are sure to enjoy?
- 63. Among your personal beliefs, are there
 - (A) some things that cannot be proved, or
 - (B) only things than can be proved?
- 64. Would you rather
 - (A) support the established methods of doing good, or
 - (B) analyze what is still wrong and attack unsolved problems?
- 65. Has it been your experience that you
 - (A) often fall in love with a notion or project that turns out to be a disappointment—so that you "go up like a rocket and come down like the stick", or do you
 - (B) use enough judgment on your enthusiasms so that they do not let you down?

- 66. Do you think you get
 - (A) more enthusiastic about things than the average person, or
 - (B) less enthusiastic about things than the average person?
- 67. If you divided all the people you know into those you like, those you dislike, and those toward whom you feel indifferent, would there be more of
 - (A) those you like, or
 - (B) those you dislike?

[On this next question only, if two answers are true, mark both.]

- 68. In your daily work, do you
 - (A) rather enjoy an emergency that makes you work against time, or
 - (B) hate to work under pressure, or
 - (C) usually plan your work so you won't need to work under pressure?
- 69. Are you more likely to speak up in
 - (A) praise, or
 - (B) blame?
- 70. Is it higher praise to say someone has
 - (A) vision, or
 - (B) common sense?
- 71. When playing cards, do you enjoy most
 - (A) the sociability,
 - (B) the excitement of winning,
 - (C) the problem of getting the most out of each hand,
 - (D) the risk of playing for stakes,
 - (E) or don't you enjoy playing cards?

Which word in each pair appeals to you more?

72.	(A)	firm-minded	warm-hearted	(B)	98.	(A)	sensible	fascinating	(B)
73.	(A)	imaginative	matter-of-fact	(B)	99.	(A)	changing	permanent	(B)
74.	(A)	systematic	spontaneous	(B)	100.	(A)	determined	devoted	(B)
75.	(A)	congenial	effective	(B)	101.	(A)	system	zest	(B)
76.	(A)	theory	certainty	(B)	102.	(A)	facts	ideas	(B)
77.	(A)	party	theater	(B)	103.	(A)	compassion	foresight	(B)
78.	(A)	build	invent	(B)	104.	(A)	concrete	abstract	(B)
79.	(A)	analyze	sympathize	(B)	105.	(A)	justice	mercy	(B)
80.	(A)	popular	intimate	(B)	106.	(A)	calm	lively	(B)
81.	(A)	benefits	blessings	(B)	107.	(A)	make	create	(B)
82.	(A)	casual	correct	(B)	108.	(A)	wary	trustful	(B)
83.	(A)	active	intellectual	(B)	109.	(A)	orderly	easy-going	(B)
84.	(A)	uncritical	critical	(B)	110.	(A)	approve	question	(B)
85.	(A)	scheduled	unplanned	(B)	111.	(A)	gentle	firm	(B)
86.	(A)	convincing	touching	(B)	112.	(A)	foundation	spire	(B)
87.	(A)	reserved	talkative	(B)	113.	(A)	quick	careful	(B)
88.	(A)	statement	concept	(B)	114.	(A)	thinking	feeling	(B)
89.	(A)	soft	hard	(B)	115.	(A)	theory	experience	(B)
90.	(A)	production	design	(B)	116.	(A)	sociable	detached	(B)
91.	(A)	forgive	tolerate	(B)	117.	(A)	sign	symbol	(B)
92.	(A)	hearty	quiet	(B)	118.	(A)	systematic	casual	(B)
93.	(A)	who	what	(B)	119.	(A)	literal	figurative	(B)
94.	(A)	impulse	decision	(B)	120.	(A)	peacemaker	judge	(B)
95.	(A)	speak	write	(B)	121.	(A)	accept	change	(B)
96.	(A)	affection	tenderness	(B)	122.	(A)	agree	discuss	(B)
97.	(A)	punctual	leisurely	(B)	123.	(A)	executive	scholar	(B)

- 124. Do you find the more routine parts of your day
 - (A) restful, or
 - (B) boring?
- 125. If you think you are not getting a square deal in a club or team to which you belong, is it better to
 - (A) shut up and take it, or
 - (B) use the threat of resigning if necessary to get your rights?
- 126. Can you
 - (A) talk easily to almost anyone for as long as you have to, or
 - (B) find a lot to say only to certain people or under certain conditions?
- 127. When strangers notice you, does it
 - (A) make you uncomfortable, or
 - (B) not bother you at all?
- 128. If you were a teacher, would you rather teach
 - (A) fact courses, or
 - (B) courses involving theory?
- 129. When something starts to be the fashion, are you usually
 - (A) one of the first to try it, or
 - (B) not much interested?
- 130. In solving a difficult personal problem, do you
 - (A) tend to do more worrying than is useful in reaching a decision, or
 - (B) feel no more anxiety than the situation requires?
- 131. If people seem to slight you, do you
 - (A) tell yourself they didn't mean anything by it, or
 - (B) distrust their good will and stay on guard with them thereafter?
- 132. When you have a special job to do, do you like to
 - (A) organize it carefully before you start, or
 - (B) find out what is necessary as you go along?
- 133. Do you feel it is a worse fault
 - (A) to show too much warmth, or
 - (B) not to have warmth enough?
- 134. When you are at a party, do you like to
 - (A) help get things going, or
 - (B) let the others have fun in their own way?

- 135. When a new opportunity comes up, do you
 - (A) decide about it fairly quickly, or
 - (B) sometimes miss out through taking too long to make up your mind?
- 136. In managing your life, do you tend to
 - (A) undertake too much and get into a tight spot, or
 - (B) hold yourself down to what you can comfortably handle?
- 137. When you find yourself definitely in the wrong, would you rather
 - (A) admit you are wrong, or
 - (B) not admit it, though everyone knows it,
 - (C) or don't you ever find yourself in the wrong?
- 138. Can the new people you meet tell what you are interested in
 - (A) right away, or
 - (B) only after they really get to know you?
- 139. In your home life, when you come to the end of some undertaking, are you
 - (A) clear as to what comes next and ready to tackle it, or
 - (B) glad to relax until the next inspiration hits you?
- 140. Do you think it more important to
 - (A) be able to see the possibilities in a situation, or
 - (B) be able to adjust to the facts as they are?
- 141. Do you feel that the people whom you know personally owe their successes more to
 - (A) ability and hard work, or
 - (B) luck, or
 - (C) bluff, pull and shoving themselves ahead of others?
- 142. In getting a job done, do you depend upon
 - (A) starting early, so as to finish with time to spare, or
 - (B) the extra speed you develop at the last minute?
- 143. After associating with superstitious people, have you
 - (A) found yourself slightly affected by their superstitions, or
 - (B) remained entirely unaffected?

Go on to the next page.

- 144. When you don't agree with what has just been said, do you usually
 - (A) let it go, or
 - (B) put up an argument?
- 145. Would you rather be considered
 - (A) a practical person, or
 - (B) an ingenious person?
- 146. Out of all the good resolutions you may have made, are there
 - (A) some you have kept to this day, or
 - (B) none that have really lasted?
- 147. Would you rather work under someone who is
 - (A) always kind, or
 - (B) always fair?
- 148. In a large group, do you more often
 - (A) introduce others, or
 - (B) get introduced?
- 149. Would you rather have as a friend someone who
 - (A) is always coming up with new ideas, or
 - (B) has both feet on the ground?
- 150. When you have to do business with strangers, do you feel
 - (A) confident and at ease, or
 - (B) a little fussed or afraid that they won't want to bother with you?
- 151. When it is settled well in advance that you will do a certain thing at a certain time, do you find it
 - (A) nice to be able to plan accordingly, or
 - (B) a little unpleasant to be tied down?
- 152. Do you feel that sarcasm
 - (A) should never be used where it can hurt people's feelings, or
 - (B) is too effective a form of speech to be discarded for such a reason?
- 153. When you think of some little thing you should do or buy, do you
 - (A) often forget it till much later, or
 - (B) usually get it down on paper to remind yourself, or
 - (C) always carry through on it without reminders?
- 154. Do you more often let
 - (A) your heart rule your head, or
 - (B) your head rule your heart?
- 155. In listening to a new idea, are you more anxious to
 - (A) find out all about it, or
 - (B) judge whether it is right or wrong?

- 156. Are you oppressed by
 - (A) many different worries, or
 - (B) comparatively few?
- 157. When you don't approve of the way a friend is acting, do you
 - (A) wait and see what happens, or
 - (B) do or say something about it?
- 158. Do you feel it is a worse fault to be
 - (A) unsympathetic, or
 - (B) unreasonable?
- 159. When a new situation comes up which conflicts with your plans, do you try first to
 - (A) change your plans to fit the situation, or
 - (B) change the situation to fit your plans?
- 160. Do you think the people close to you know how you feel
 - (A) about most things, or
 - (B) only when you have had some special reason to tell them?
- 161. When you have a serious choice to make, do you
 - (A) almost always come to a clear-cut decision, or
 - (B) sometimes find it so hard to decide that you do not wholeheartedly follow up either choice?
- 162. On most matters, do you
 - (A) have a pretty definite opinion, or
 - (B) like to keep an open mind?
- 163. As you get to know people better, do you more often find that they
 - (A) let you down or disappoint you in some way, or
 - (B) improve upon acquaintance?
- 164. When the truth would not be polite, are you more likely to tell
 - (A) a polite lie, or
 - (B) the impolite truth?
- 165. In your way of living, do you prefer to be
 - (A) original, or
 - (B) conventional?
- 166. Would you have liked to argue the meaning of
 - (A) a lot of these questions, or
 - (B) only a few?

Appendix D

Transformation of Difference between Point Totals into Preference Scores (Myers, 1962)

Male: T
Female: F

Male: F Female: T

Diff. in Points	Pref.	Diff. in	Pref.
	Score	Points	Score
0 = 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 6 17 18 19 20 21 22 23 24 25 26 27 28 29 30 =	1 357911 1315 1719 2123 25729 31335 37944 4749 51355 57961	1 = = = = = = = = = = = = = = = = = = =	1357913579135791357913579135791357913579

COMMON PERCEPTION INVENTORY

The following statements are perceptions or observations which most people sometimes make about themselves. Across from each statement is an estimate scale. Please circle the word that seems most accurate and appropriate for you.

The form is concerned with your usual state of mind or perceptual habits. Everyone has daily fluctuations, but your most common or typical state should be circled.

For estimating the approximate amount of time involved, use the following guides: "sometimes" is 1 to 25%, "as often as not" is about 50%, and "frequently" is about 75% of the time. Don't skip any items. Answer each as honestly as you can.

As Often

Common Perception	Never	Sometimes	As Not	Frequently	Usually
<pre>l. When I look at myself, I think "That's not the real me."</pre>	0	1	2	3	4
 I don't seem to have enough self-confidence. 	0	1	2	3	4
3. I won*t be able to accept myself until I get more self-confidence.	0	1	2	3	4
4. I don't seem to be as good a person as I can and ought to be.	0	1	2	3	4
5. My life seems worthless and unproductive.	0	1	2	3	4
6. It seems to me that I am a failure.	0	1	2	3	4
7. It seems to me that I am a phony.	0	1	2	3	4
8. It seems to me that people use me.	0	1	2	3	4
9. It seems to me that I don*t live up to my potential.	0	1	2	3	4
10. When people treat me unfairly or unjustly, it causes me emotional pain that is worse than most physical pain.	0	1	2	3	4
.1. When things that really matter to me don't go right, it upsets me very much.	0	1	2	3	4
2. No one seems to care about me enough.	0	1	2	3	4

		Never	Sometimes	As Often As Not	Frequently	Usually
13.	The solution to most of my problems is for certain people to care enough for me to meet my dependency needs.	0	1	2	3	4
4.	I have tried to change myself, but it seems I can't do it.	0	1	2	3	4
5.	I seem unlucky.	0	1	2	3	4
6.	It seems that I have to be a little tense to keep myself motivated to do the things I should do.	0	1	2	3	4
7.	When I hurt other people emotionally, the fact that I did it hurts me more than what I did to them.	0	1	2	3	4
8.	If someone does me wrong, I feel that I have to get even.	0	1	2	3	4
.9.	I don't let little things bother me, but if someone keeps piling nonsense on me which no one would stand for, I really blow my lid.	0	1	2	3	4
!0	When I love a person, a good "knock-down, let-it-all-hang-out" argument makes me feel closer to him or her.	0	1	2	3	4
?1	The very time I decide to be carefree and loose, something bad always seems to happen.	0	1	2	3	4
22	. It seems to me that I am too fat.	0	1	2	3	4
23	• It seems to me that I am too skinny.	0	r	2	3	4
24	. It seems to me that I am not intelligent enough.	0	1	2	3	4
25	It seems wrong to believe that I am the most important person in the world to me.		1	2	3	4

	Never	Sometimes	As Often As Not	Frequently	Usually
26. It seems that I can't concentrate the way I should.	0 .	1	2	3	4
27. The very time I decide to trust someone, it seems that he or sh always lets me down.		1	2	3	4
28. The world as I know it seems cold, cruel, and unfeeling.	0	1	2	3	4
29. It seems to me that only really stupid people get used or taken advantage of.		1	2	3	4

COMMON BELIEF INVENTORY

The following are statements which most people hold to some degree. Beside each statement is an estimate range. Please circle the number that seems most accurate and appropriate to you.

Again, this form is concerned with your usual state of mind or belief strengths. Daily fluctuations which change with the times, the places, and the people involved will constitute periodic exceptions in your way of thinking but only your most common or typical belief strengths should be circled.

In terms of percentage time, "mildly" is about 25%, "moderately" is about 50%, and "strongly" is about 75% of the time. Don't skip any items. Be as honest as you can.

Common Belief	Never	Mildly	Moderately	Strongly	Absolutely
<pre>l. I believe that I ought to be or should be different from what I a</pre>		1	2	3	4
2. I believe I need more self- confidence.	0	1	2	3	4
3. I believe that I would like and accept myself better if I had more self-confidence.	0	1	2	3	4
4. I believe I ought to be a better person.	0	1	2	3	4
5. I believe all people should have worthwhile lives.	0	1	2	3	4
6. I believe that if I act differently from my usual self, I will be a phony.	0	1	2	3	4

		Never	Mildly	Moderately	Strongly	Absolutely
7.	I believe that a person's behavior describes the person.	0	1	2	3	4
8.	I believe I am a born worrier.	0	1	2	3	4
9.	I believe that people should live up to their potential.	0	1	2	3	4
10.	I believe there is me and another "real" me.	0	1	2	3	4
11.	I believe that my emotional feelings are more important for my self-understanding than my thoughts.	0 .	1	2	3	4
12.	I believe a person has got to be unhappy if he has few or no real friends (i.e.: people who really care).		1	2	3	4
13.	I believe I should be more intelligent than I am.	0	1	2	3	4
14•	I believe I am incapable of sexually satisfying most normal members of the opposite sex.	0	1	2	3	4
15.	I believe people must have goals, purpose, and direction in life which are generally accepted as worthwhile before they can accept themselves.	0	1	2	3	4
16.	I believe that if people reall get to know the real me, they will not like me.	у О	1	2	3	4
17•	I believe I should be more masculine.	0	1	2	3	4
18.	I believe I should be more feminine.	0	1	2	3	4
	Regardless of their attempts to deceive me, I believe that I can tell pretty well what people are thinking about me.	0	1	2	3	4
	I believe what is real to me is the most important reality for me to consider when solving my personal problems.	0	1	2	3	4

		Never	Mildly	Moderately	Strongly	Absolutely
:1.	I believe I ought to try to please other people even if I am not pleased.	0	1	2	3	4
!2.	I believe that it is my regrettable or abnormal past that is causing most of my personal problems.	0	1	2	3	4
?3.	I believe that worry does sometimes help me.	0	1	2	3	4
24•	I believe that most people who don't behave the way they show behave, ought to be punished.	0 ld	1	2	3	4
25.	I believe that it is natural and normal to get upset if really important things don't go the way they should.	0	1	2	3	4
26.	I believe that people who try to control their emotions don't really enjoy life; they are like robots.	0	1	2	3	4
27•	I believe a person is hap- piest when his emotions are free and uncontrolled.	0	1	2	3	4
28.	I believe that a person who does not feel guilty about his shortcomings and failures is not a whole person; I mean, that person has to be some kind of psychopath.	0	1 .	2	3	4
29.	I believe that how badly I feel when a loved one leaves me or is hurt shows me how much I really care for that person.	0	1	2	3	4
	I believe that being really sincere in my desires and really honest in emotional experiences are the most important factors that make things turn out the way I want them to.	0	1	2	3	4
	I believe that my present emotional responses to people and life events are the only real, natural, and normal feelings for me to have, and I wouldn't be "for real" the	0	1	2	3	4

		Never	Mildly	Moderately	Strongly_	Absolutely
32.	I believe that if I really make an honest effort to do something and I fail at it, that means that I can't do the thing; so, there is no rational reason to persist in trying to do it.	0	1	2	3	4
I V	believe that if certain becople were to treat me the way they should, I could seel better and/or accept byself better.	0	1	2	3	4
34.	I believe that if I could make certain people see how their actions cause emotional pain, they would treat me better.	0	1	2	3	4
35.	I believe that people have to like themselves in order tocaccept themselves.	0	1	2	3	4
36.	I believe that there are standards of right and wrong that ought to be followed regardless of personal feelin	0 gs•	1	2	3	4
37•	I believe that everyone needs and has to be loved in order to accept himself.	0	1	2	3	4
38.	I believe that everyone ought to put other people's feeling ahead of their own more often	s	1	2	3	4
39.	I believe that how other peop treat you is the main factor in determining your feelings of worth and self-acceptance.	le 0	1	2	3	4
40•	I believe that if people woul just be honest with me, I wou have so many emotional proble	ldn•t	1	2	3	4
41.	I believe that magical or other supernatural powers are causal factors in life events.	0	1	2	3	4

Appendix F

Breakdown of MBTI and IPTI Scores by Subject

1. 2. 3. 4. 5. 6. 7. 8. 9. 11. 12. 13. 14.	T1(20) T1(33) T3(44) T5(49) T7(33) T9(41) T11(16) T11(38) T13(22) T15(24) T17(34) T19(52) T23(28) T25(23) T41(23)	34. 35. 36. 37. 39. 41. 42. 43. 445. 49.	F19(50) F19(28) F19(31) F21(40) F21(27) F21(23) F21(30) F23(35) F23(24) F23(24) F23(26) F27(48) F27(59)
16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 30. 31. 32.	F1(32) F1(42) F3(30) F3(38) F3(20) F5(18) F5(41) F5(44) F7(43) F7(6) F9(16) F9(15) F11(34) F13(30) F13(54) F13(41) F15(18)	50. 51. 52. 53. 556. 556. 58. 590. 61. 62. 63. 64. 65.	F29(19) F29(53) F29(53) F31(50) F33(47) F33(43) F39(133) F39(133) F39(25) F39(25) F41(30) F41(31) F47(44) F49(44)

Note: Numbers in parentheses () indicate scores on the Irrational Personality Trait Inventory

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