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Personality and Mysticism: An Experimental Design

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PERSONALITY AND MYSTICISM

AN EXPERIMENTAL DESIGN

by
Deborah Marie Ellison-Rogers, B.S.

A Digest Presented to the Faculty of the Graduate School
of the Lindenwood Colleges in Partial Fulfillment of
the Requirements for the Degree of
Master of Art

1982



DIGEST

This research investigates the relationship between personality as measured by the Singer-Loomis Inventory of Personality and the quantity of mystical experiences as measured by the Mysticism Scale. A review of the literature shows that introverts have more awareness of the archetypes and the archetypes often appear in mystical experiences. Awareness of mystical experiences is precisely what the Mysticism Scale measures.

The results were largely insignificant. However, there was a definite skew toward introversion in samples for both the pilot project and the research project. It is felt that this skew is a function of the choice of populations from which the subjects were drawn. In addition, 95% of the subjects commented that the Mysticism Scale was confusing.

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A Culminating Project Presented to the Faculty of the Graduate
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Degree of Master of Art

1982

COMMITTEE IN CHARGE OF CANDIDACY:

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Chairperson and Advisor

Susan Myers

Adjunct Assistant Professor Charles Orme-Rogers

Professor Gerald Slusser

DEDICATION

This thesis is dedicated to four very special people:

(1) To my Father, who read many of my papers. He corrected and/or questioned spelling, grammar, and sentence structure, so that these types of errors would not show up in the finished product.

(2) To my Mother, who took care of my son so that I could continue my education. She also supported and encouraged me when I wanted to quit.

(3) To Richard, who gave me support when I needed it.

(4) Most of all, this thesis is dedicated to my son, Raymond. He has waited a very long time for Mom to graduate.

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CHAPTER I

Introduction

The present research is designed to quantitatively study the mystical experiences of introverts and extraverts. During the past 15 years, research has been carried out in the area of mysticism, meditation, Buddhism, Hinduism, and Zen Buddhism and some of these studies have included a classification of the subjects by personality and/or personality traits (Akers, Tucker, Roth & Vidiloff, 1977; Davidson, Goleman, & Schwartz, 1976; De Grace, 1976; Di Nardo & Raymond, 1979; Douglas, 1971; Ferguson & Gowan, 1976; Puryear, Cayce, & Thurston, 1976; Smith, 1978; Tjoa, 1975, Von Den Berg & Mulder, 1976; West, 1979; William, Francis, & Durham, 1976). Others have utilized both personality inventories and a mysticism scale (Heisler, 1976; Hood, 1973, 1974, 1975, 1976, 1979). But these studies have used either psychopathologically loaded test batteries or inventories that do not present well defined categories of personality.

Because of the lack of specific research in this area, the next two sections of this paper will focus on the empirical and theoretical foundations of Jung's personality theory and the common characteristics of mystical experiences.

Personality Types

C. G. Jung first presented his view of personality types at a

lecture delivered at the Psychoanalytical Congress in Munich in 1913. At that time, he proposed that there were two attitudes with which people could orient themselves toward other people and the environment. He based his idea upon his observation of the differences between hysteric patients and schizophrenic patients, suggesting that hysterics exhibit a generally extraverted typology while schizophrenics exhibit a generally introverted typology.

In 1913, Jung stated that the movement of libido in the hysteric, as well as in all people who exhibit the extraverted personality type, is toward the object, that is the libido moves away or out of the extraverted individual and toward anything existing in physical reality (Jung, 1971). Jung did not conceptualize libido as only sexual; rather, he saw the importance of it as identifying some form of energy (Jung, 1961). Thus, the movement of libido may be thought of as a movement of energy from the extravert toward other people and/or objects in the extravert's environment.

Conversely, the schizophrenic and all individuals who are predominantly of the introverted personality type withdraw the libidinal energy from the object and, thus, devalue the object. The movement of libido in these individuals is concentrated on the complexes (Jung, 1971). The original definition of a complex was, a group of ideas specific to an individual, that have a common emotional tone (Jung, 1973). This definition was expanded in 1920 to include the emotionally toned contents that arise from the collective unconscious, that part of the unconscious which is common to all people (Jung, 1969).

Jung kept the main ideas of the attitude types after breaking with Freud, but dropped the direct correlation of these types with Freud's personality theory. By eliminating the correlation between the attitude types and Freud's personality theory, Jung eliminated the necessity of confining his theory to the observation of individuals who are exhibiting a psychopathological reaction to some intropsychic and/or external event. Eliminating the correlation between the two theories also enabled Jung to expand and elaborate his theory into an expansive and growth oriented theory. In a sense, Jung's theory is a holistic personality theory because it looks at all of the identified facets of the personality rather than only focusing on the presenting pathology. It also encourages an increasing assimilation and increased working integration of all of the facets of the personality.

When a man or a woman is predominantly extraverted, he " . . . thinks, feels, acts, and actually lives in a way that is directly correlated with the objective conditions and their demands" (Jung, 1971, p. 333). These individuals need to join with others. They find their meaning in their relationships with other people and objects in the environment. Extraverts enjoy working and playing in groups. The collective norm is their standing in life. The opinions of others have a very strong influence on the extravert's opinions (Jacobi, 1973; Loomis & Singer, 1980).

The introverted attitude is the opposite of the extraverted attitude. "A man or a woman who is predominantly introverted " . . . is naturally aware of the external condition, [but he] selects the

subjective determinants as the decisive ones" (Jung, 1971, p. 373-4). These individuals shy away from large gatherings. They appear unapproachable and unsociable. While introverts have thoughts, feelings, ideas and perceptions about the external world, they keep them mostly to themselves. Introverted people emphasize their internal world of ideas, their subjective reactions, and the archetypal conditions and their demands. Archetypes are the primordial conditions and/or majestic presence that characteristically inspires both dread and fascination, and they constitute the basis of the irrational elements of the psyche. They feel best when they are alone. Introverts make decisions independent of the social norms and the opinions of others. They find it difficult to make friends; making close friends only after the safety of the relationship is guaranteed.

An individual may exhibit a predominance of one attitude type or the other, but both attitude types exist within the psychic structure of all individuals. So that, if a man or woman is predominantly extraverted, introversion exists within his psychic structure as a compensation and a potential for psychic growth. However, these individuals often avoid the compensating attitude by suppressing or repressing it within themselves or projecting it on to other individuals or the environment.

Jung proposed that besides the two attitude types, there are also four functions: thinking, feeling, sensation, and intuition. These functions are divided into two sets: thinking and feeling; sensation and intuition. Jung identified thinking and feeling as rational functions. They are rational because they place a judg-

ment on the contents of consciousness. Sensation and intuition are the irrational functions. Instead of judging the contents of consciousness, the irrational functions receive information into consciousness, that is, they are perceptual. Like the attitude types, the members of each set of functions form an opposing yet compensating relationship with each other.

Briefly the functions may be identified and described in the following ways:

The thinking function is the use of logical thought processes to pass a judgment of true or false on the contents of consciousness (Jacobi, 1973; Loomis & Singer, 1980).

The feeling function is the use of a standard of values to pass a judgment of liked or disliked, accepted or rejected on the contents of consciousness (Jacobi, 1973; Loomis & Singer, 1980).

The sensation function is a psychophysical function that perceives external reality via the five known senses and perceives internal reality in the organic processes via the central nervous system (Jacobi, 1973; Jung, 1971; Loomis & Singer, 1980).

An individual utilizing the intuitive function, perceives the contents of consciousness by means of a mediational factor which is either unknown, or sufficient scientific data has not yet been collected to prove its' existence and/or how it gains access to ego conscious. The intuitive individual will know the underlying meaning and the possible effects and implications of an event, the underlying truth about an individual's behavior, and/or the general color and atmosphere of an environmental situation (Jacobi, 1973; Jung, 1971;

Loomis & Singer, 1980).

While it is possible to examine and to develop tests that identify the two attitudes and the four functions as separate and distinctly different ways of approaching individuals and the environment (Myers, 1962; Wheelwright, J. B., Wheelwright, J. H., & Beubler, J. A., 1964), this and the preceding presentation of the attitudes and functions do not provide a complete picture of the personality types. A truer picture is provided by examining the eight cognitive modes for which the two attitudes and the four functions provide the basis. The eight cognitive modes thus formulated are: extraverted thinking, extraverted feeling, extraverted sensation, extraverted intuition, introverted thinking, introverted feeling, introverted sensation, and introverted intuition. These modes will be examined in detail shortly. Like the attitudes and the functions, the cognitive modes form pairs that are both opposed and complementary to each other. The pairs formed from the eight cognitive modes are: extraverted thinking and introverted feeling; extraverted feeling and introverted thinking; extraverted sensation and introverted intuition; as well as extraverted intuition and introverted sensation (Jung, 1971; Loomis & Singer, 1980).

The reader may already have some idea of behavior that may be exhibited by an individual who is using one of the cognitive modes. In the case of extraverted thinking, the actions of these individuals are dependent upon their intellectual conclusions which in turn are based upon external objective data, whether external facts or the collective norm. Their actions are directed by the "shoulds" and

"musts," that are collectively standardized (Jung, 1971; Loomis & Singer, 1980).

Extraverted feeling individuals immediately place a value on people, situations, and objects, and they seldom keep their judgment to themselves. Their feelings are in harmony with the external conditions and thus, they choose the appropriate behavior for the situations. Extraverted feeling people tend to be open, warm, empathetic and generally self-sacrificing. They like to be noticed and appreciated. They dislike apathy. Their choice of a love partner or mate tends to be socially appropriate (Jung, 1971; Loomis & Singer, 1980).

Extraverted sensation individuals are lovers of physical reality. They enjoy sharing with others good food, music, sports, movies, nature's beauty, and lovemaking. Their powers of observation are very acute (Jung, 1971; Loomis & Singer, 1980; von Franz, 1979).

The extraverted intuitive individual, like the extraverted sensation individual, is highly dependent upon the external situation, but the extraverted intuitive individual is dependent on the possibilities and the changing situation while the extraverted sensation individual is dependent on the present physical realities. The individual who is primarily extraverted intuitive, conceives of the possibilities in a given situation. Business people who manufacture and market new products and inventions; and journalists and publishers who know what will be popular in the coming months and years will be among the people of this mode. Stockbrokers will also be found in this mode. A lack of patience is characteristic of the

extraverted intuitive mode. Extraverted intuitive people have a strong dislike of constricting relationships (Jung, 1971; von Franz, 1979).

Like introverted individuals, introverted thinking mode individuals begin and end their environmental orientation with the subjective position. With introverted thinking people, the logical and philosophical foundations of a given field of study are more important than the objects that are studied by that field and the reactions of those who hear or read the introverted thinking individual's work. Philosophy is, therefore, the primary field of work of the introverted thinking individual. In the extreme, the introverted thinking individual may mythologize rather than stay with logical and philosophical workings of the mind or other fields of study (Jung, 1971; von Franz, 1979).

Introverted feeling mode individuals may appear cold and aloof on the surface because of natural reserve, but underneath there is a depth of loyalty and devotion that, whether expressed or not, has an almost magical and overpowering quality. Their internal standard of values is very strong and may well be at variance with current social standards. But these standards of value by which they judge other people and the environment are seldom expressed. The archetypal images that the introverted feeling mode individual feels very deeply form the basis of the individual's value system. As long as the egos of introverted feeling mode individuals remain in a subordinate position, that is, their egos do not identify with the archetypes, these individuals will not try to force their value

system upon other people (Jung, 1971; Loomis & Singer, 1980).

The introverted sensation individual is guided by the subjective sensation of another person or an object rather than by the person or object itself. This subjective sense impression enables introverted sensation individuals to perceive the immediate underlying reality, particularly its good points, without showing their reactions to a given situation. Thus, the introverted sensation individual appears to have considerable self-control, acceptance, calmness, and a rather laid back attitude. Because these individuals apprehend the underlying good qualities of other individuals or situations, they tend to be taken advantage of. Introverted sensation individuals tend to become the victims of domineering and aggressive people but in the end, they may take their revenge on their oppressors at an inappropriate time and with reinforced stubbornness (Jung, 1971; Loomis & Singer, 1980). Introverted sensation individuals are "guided by what actually happens to them" (Loomis & Singer, 1980, p. 15). But taken to the extreme, they actually live ". . . in a mythological world, where men, animals, locomotives, houses, rivers, and mountains appear either as benevolent deities or as malevolent demons" (Jung, 1971, p. 397).

Of all of the introverted modes, the introverted intuitive is the most directly involved with the archetypes and the mythological contents of the collective unconsciousness. These individuals perceive the contents of the collective unconscious in the same way that the extraverted sensation types perceive physical reality. This way of perceiving the collective unconscious provides its

contents with an objective character, that is; the archetypes and the mythological contents become objective psychic realities. Introverted intuitive individuals may move from one archetype or mythological event to another without any attempt to release themselves to the contents or to translate it into some type of objective physical reality. On the other hand, they may decide to investigate or to translate it into some type of artistic creation no matter how primitive the product may be. Artists, poets, seers, mystics, prophets, and those people who actively practice some type of parapsychological phenomena are to be found in the introverted intuitive mode (Jung, 1971, von Franz, 1979).

This paper has stressed the specific ways each attitude, function, and cognitive mode would focus the actions, perceptions, and thoughts of individuals. It should be noted, though, that it seems likely that most individuals consciously utilize all of the attitudes, functions, and cognitive modes to some extent. Therefore, any individual may find himself identifying to some degree with any or all of the preceding descriptions.

Mysticism

According to the Educational Book of Essential Knowledge (Thatcher, 1969), the word mysticism is derived from the Latin word "mysticus" and from the Greek word "mysticos" meaning the one who is initiated. The word mysticism then means,

Views or tendencies in religion which aspire toward a communication between man and his Maker through the inward perception of the mind, more direct than that which is afforded us through revelation; a seeking to

solve the mysteries of existence by internal illumination or special revelation (Thatcher, 1969, p. 556).

These views have been elucidated in the literature of both the East and the West for centuries. Because of this, it would be impossible to review all or even a representative sample of the literature in a paper of this size. Therefore, this study limits the theoretical presentation to W. T. Stace's philosophical discussion of mysticism. There are three main reasons for choosing this approach in addition to that previously mentioned: (a) Stace (1960) identified the underlying characteristics or the universal core characteristics of mystical experiences, (b) the universal core characteristics are more easily understood by the general population than the nomenclature of the mystical traditions, and (c) the Mysticism Scale that will be used in the proposed research is based on Stace's (1960) categories of the core characteristics of mystical experiences.

Stace identified two main types of mystical experiences: extravertive and introvertive. Extravertive mystical experiences could be identified or characterized as intuitive perception and ideation of physical reality as a unity of existence, in addition to perceiving and conceptualizing the separateness of physical objects. It is important to understand that all the physical senses continue to function in their usual way in extravertive mystical experiences and that it is the inward perception of the mind that accounts for the altered perception of physical reality.

Rudolf Otto (cited in Stace, 1960) stated that, "Black does not cease to be black, nor white white. But black is white and white is

black. The opposites coincide without ceasing to be what they are in themselves." In this case, the individual actually sees black as black and white as white but, in addition to this perception, he sees black as white and white as black. It could be argued that this particular experience can be easily replicated by asking a subject to look at a white light and then to look at a white wall. The subject will see at least a dark if not black image of the white light.

A more impressive experience of this type was that reported by Capra (1974). He experienced (saw) the Dance of Shiva, a Hindu mystical experience that identifies the underlying vibratory essences of physical reality. In other words, what Capra may have seen was the various vibrations of particles and/or subatomic particles that magnetically pull together to form what, in ordinary sight, appears to be water, sand, and his physical body. He knew these objects to be one.

Capra's experience identifies both the unity of all objects and their subjective aliveness. This tends to suggest that all objects, even in their separateness, are one and the same in their unity and even the most inanimate objects are very much alive in their vibrating beingness.

In both examples, there was a sense of otherness or of objectivity. There was an I-ness, a state of being that identifies itself as "I", separate from the reality being seen. Even in Capra's case, this sense of separateness, of objectivity was upheld. He identified his physical body as being involved in the experience

while a state of being or I-ness was the observer.

Neither of the two examples explicitly identifies a positive affect accompanying the mystical experience. Yet it might well be assumed that Capra, a physicist and an individual who has apparently studied various philosophies, experienced at least a feeling of satisfaction from his vision of the Dance of Shiva.

Capra's statement, that he had seen the Dance of Shiva, identifies that his vision was sacred or divine. Shiva is one of the Lords or impersonal personalities of the Hindu trinity. Shiva in His own right is divine in nature, therefore, His dance which is a movement of His divine beingness is also divine. Thus, Capra's vision was divine.

The paradoxical nature of these experiences can best be seen in the quotation from Rudolf Otto (cited in Stace, 1960). That white is white and black is black are generally accepted statements of fact and, as such, they are also accepted as rational and logical statements. But to say that white is black and that black is white are not accepted facts. They are paradoxes that can not be understood or explained in a rational or logical way.

The last characteristic of extravertive mystical experiences is the ineffableness of the mystical experience. Stace (1960) includes this characteristic in his list of characteristics but not without reservations. His reservations are well founded since he simply looked at the facts. The mystics have said that mystical experiences are ineffable, that these experiences can not be described. Mystics go on to describe the experience in detail. Jung

would call the description of the experience the elaboration of the experience. He means that mystics express their experience in some form, written, painted, or some other form. This enables them to differentiate the experience from the ego. It also enables the mystic to transmit the experience to other people if the mystic chooses to do so. However, the essence of the experience can never be fully described through these forms.

To describe the essence of the experience would be like trying to describe the essence of a feeling. It is possible to use symbolic language to describe a feeling. But the essence of the feeling, the way in which the individual actually experiences the feeling, alludes description. This is how it is with the mystical experience. No matter what medium is used, the mystic can never describe the essence of the mystical experience.

A summary of the material just covered on the characteristics of the extravertive mystical experience is as follows:

1. The unifying vision, expressed abstractly by the formula "All is One." The One is, in extravertive mysticism, perceived through the physical senses, in or through the multiplicity of objects.
2. The more concrete apprehension of the One as being an inner subjectivity in all things, described variously as life, or consciousness, or a living Presence. The discovery that nothing is "really" dead.
3. Sense of objectivity or reality.
4. Feeling of blessedness, joy, happiness, satisfaction, etc.
5. Feeling that what is apprehended is holy, or sacred, or divine. This is the quality which gives rise to the interpretation of the experience as being an experience of "God." It is the specifically religious element in the experience. It is closely intertwined with, but not identical with, the previously listed characteristic of blessedness

and joy.

6. Paradoxicality.
7. Alleged by mystics to be ineffable, capable of being described in words, etc.
(Stace, 1960, p. 79)

The characteristics of introvertive mystical experiences are identical to those of extravertive mystical experiences except that the characteristics identified as one and two are different for the two types of experiences. With extravertive mystical experience, the mystic continues to receive into consciousness all sensory stimuli that are strong enough to become conscious. However, this is not the case with introvertive mystical experiences.

The introvertive mystical experience is typically characterized by a withdrawal from sensory stimulation, whether from external sources or from internal organs. To a certain extent everyone has experienced this phenomena. For example; when concentrating on something, say reading a book, another person may speak to us but we do not hear them. This is the same type of thing that happens in the introvertive mystical experience except that it is much more pronounced or extensive.

So far the emphasis has been placed on the physiological differences between the two types of experiences, but for the mystic this is not the most important difference. In the extravertive mystical experience, mystics are aware of objects in their own right and, at the same time, they are aware of the unity and aliveness of the objects. In the introvertive mystical experience, the perception or identification of an object other than the subject ceases. This is because subject and object unite. That is, subject is ob-

ject and object is subject. There is no existence other than this unity which obliterates all duality no matter how refined or subtle. The experience is void of all contents which, if they existed, would imply duality.

By obliterating all duality, this experience eliminates all sense of time and space in the mystic. Time and space imply a multiplicity of existence. That is, time and space imply that there are two or more separate objects, or an object and a subject that are separate in their existence. If the objects are separate then there must be some kind of boundary between them. The boundary implies the existence of some kind of space as well as separateness, for there are limits put on the objects.

Time is eliminated because there is no movement or relatedness between two objects or subject and object. To have time there must be relatedness or movement between two or more objects; this relatedness can be measured by the time in which it takes to move something between them.

The two characteristics that identify introvertive mystical experiences as distinct from extravertive mystical experiences are: the experience of unity of subject and object with an accompanying obliteration of all existence other than the existence of the unity; and the elimination of space and time.

One might ask how an experience of the unity of subject and object can be considered objective? It seems possible that the experience itself may not be considered objective in the strictest sense of the word because there is no separate subject to observe

and/or relate to the object. However, when the mystic tries to translate the experience into some type of objective physical reality after the experience has ended, there is the reappearance of the ego. The ego becomes the subject in relation to the experience which in turn is the object of the ego.

The remaining characteristics of the introvertive mystical experience are identical to that of the extravertive mystical experience and a description of them would simply be a repetition of what has already been said. At this point a list of the characteristics of the introvertive mystical experience would be useful before identifying the characteristics that were used in the development of the Mysticism Scale (Appendix C). These characteristics are:

1. The Unitary Consciousness, from which all the multiplicity of sensuous or conceptual or other empirical content has been excluded, so that there remains only a void and empty unity. This is the one basic, essential, nuclear characteristic, from which most of the other inevitably follow.
2. Being nonspatial and nontemporal [that is during the introvertive mystical experience the mystic does not experience space and time]. This of course follows from the nuclear characteristic just listed.
3. Sense of objectivity or reality.
4. Feelings of blessedness, joy, peace, happiness, etc.
5. Feeling that what is apprehended is holy, sacred, or divine. Perhaps it should be added that this feeling seems less strong in Buddhist mystics than in others, though it is not wholly absent and appears at least in the form of deep reverence for an enlightenment which is regarded as supremely noble. No doubt this is what explains the "atheistic" character of the Hinayana. It should be noted that the feeling of the definitely "divine" is as strongly developed in the pantheis-

tic Hindu mysticism as in the theistic mysticisms of the West and the Near East.

6. Paradoxicality.
7. Alleged by mystics to be ineffable.
(Stace, 1960, p. 110 & 111).

The word mystical was previously defined as the inward perception of the mind. This definition was inferred to be true whether the mystical experience was of the introvertive or extravertive type. Jung has said that introverts choose the subjective determinants of an experience as the most important element in their relationship to external and internal conditions. However, this definition does not specifically identify introverts as those people who would be most aware of a mystical experience. On the other hand, the dictionary defines the word introvert as "to turn inward or interest directed inward" (Thatcher, 1969, p. 453). It can be seen that both the word mystical and the word introvert have inwardness or an interest in the inward experience and/or perception as a major part of their definition. This is part of the reason for hypothesizing that introverts are more aware of mystical experience than extraverts.

In addition, it was indicated in the section on Jung's personality theory that extraverts orient themselves in direct relationship to physical reality and its' demands. In a sense, physical reality validates the existence of the extraverted individual. Because of the powerful validating effect that physical reality has on the extraverted individual, it seems likely that this type of individual would have little or no motivation to be aware of mystical experiences.

Introverted individuals, on the other hand, are motivated and validated by their subjective experience. They tend to be aware of what is happening within themselves, both physically and introspsychically, and how they are being affected by physical reality. Jung identified this intrapsychic awareness as an awareness of the archetypes. An extensive amount of literature in Analytical Psychology has dealt with the symbolic form of the archetype. The present research, however, is interested in investigating the core or subjective experiencing of the archetype rather than the symbolic form by which the archetype may appear, or by which the experience may be communicated to other people.

Besides the hypothesis that introverts are more aware of mystical experiences than extraverts, it is also hypothesized that women are more aware of mystical experiences than men. Traditionally men have been stereotyped as extraverts while women have been stereotyped as introverts. At the present time, there is no known literature to substantiate this hypothesis. It is included in this research because it may have an interactive affect on the dependent variable.

CHAPTER II

Methods

Subjects

The subjects of the pilot project were solicited from among the faculty and students of a college for individualized education and from among the staff members of a state mental health facility. There were four categories of subjects: male introverts, male extraverts, female introverts, and female extraverts.

A subject must register a difference of one or more points between the introvert and extravert scores as measured by the Singer-Loomis Inventory of Personality (SLIP) to be considered either an introvert or an extravert. A difference of zero is considered to be the hypothetical mean on a scale of differences ranging from a +240 points (introverts) to a -240 points (extraverts). Theoretically, a difference of zero is considered to mean that subjects have identified themselves as utilizing their introverted and extraverted attitudes in quantitatively equal amounts.

Twenty of the twenty-one subjects of the pilot project were recruited from the staff at a state mental health facility. Four of the staff members were also involved in the college for individualized education. The results of the personality inventory exhibited a high skew toward inversion. This skew suggested that the employ-

ees in a mental health facility show a tendency toward introversion. This tendency held whether the subjects were part of the administrative staff, support staff, or treatment staff. It was felt that this type of skew would probably generalize to members of other branches of the health care field. If this were so, the tendency toward introversion in the health fields could affect the results of this research. However, ignoring potential subjects from this field could also affect the results. Therefore, it was decided that the subjects enrolled in clusters in the health care field would comprise not more than 25% and not less than 10% of the total subjects in the present research. The subjects enrolled in clusters in the health care field comprised 21.6% of the 102 subjects tested.

The subjects of the research project were students at a college for individualized education. Various faculty members were solicited by the author to allow the students in their respective classes to participate in the present research during a group meeting.

Of the 102 students who took part in the research, 61 students were enrolled in business clusters, 19 students were enrolled in general studies clusters, 4 students were enrolled in health administration clusters, and 18 students were enrolled in psychology clusters. One male and two female of the 102 students were omitted from the analysis because of missing data. This left 99 usable protocols.

Apparatus and Materials

Singer-Loomis Inventory of Personality. Singer and Loomis (1979) designed a personality inventory to identify an individual's personality type based on the previously discussed theory. This was not the first inventory based on Jung's theory but it was the first inventory that identified the amounts of differentiation of the eight cognitive modes (personality types) as well as identifying the primary attitude and function. This inventory provides both the clinician and the researcher the advantage of a more complete assessment of the client's or subject's cognitive personality.

To provide this type of assessment, Singer and Loomis (1979) designed a questionnaire with fifteen situations. Each situation has eight answers, with each answer corresponding to one of the eight cognitive modes, and each answer is rated from zero to four with zero meaning never and four meaning always. The sentences are then placed in their appropriate categories and their ratings are tabulated to provide a raw and mean score for each category. Table 1 presents the mean scores and standard deviation for each category for the twenty-one subjects of the pilot project. The mean scores and standard deviations for the functions and the attitudes were calculated by the author and are based on the raw data.

The present research is primarily interested in the introvert (introversion) and extravert (extraversion) scores. Because of their subjective and archetypal orientation, introverts, particularly introverted intuitives, are more likely to be aware of

Table 1
 Mean Scores and Standard Deviations
 from Twenty-one SLIP Profiles

| Cognitive Mode | | | | | | | | |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Scores | IT | IF | IS | IN | ET | EF | ES | EN |
| Mean | 35.05 | 35.48 | 37.62 | 33.81 | 35.28 | 30.52 | 29.14 | 31.14 |
| S.D. | 7.1 | 6.24 | 6.42 | 6.54 | 7.88 | 7.29 | 8.27 | 7.58 |

| Function | | | | |
|----------|-------|-------|-------|-------|
| Scores | T | F | S | N |
| Mean | 70.43 | 66 | 66.76 | 64.95 |
| S.D. | 14.26 | 11.64 | 12.23 | 12.96 |

| Attitude | | |
|----------|--------|--------|
| Scores | I | E |
| Mean | 141.95 | 126.33 |
| S.D. | 19.76 | 26.24 |

I = Introversion E = Extraversion
 T = Thinking F = Feeling S = Sensation N = Intuition

The top two lines provide the mean scores and standard deviations from the profiles of the twenty-one subjects of the pilot project. The last four lines provide the mean scores and standard deviations for the function and attitudes. They were calculated from the raw data.

mystical experiences. These experiences are quantitatively measured by the Mysticism Scale.

Mysticism Scale. When Hood (1975) developed the Mysticism Scale, he united the two lists of characteristics of mystical experiences. Hood (1975) stated that Stace had conceptualized eight categories of characteristics of the mystical experience. However, by comparing Stace's (1960) lists systematically a new list can be developed in which there are nine items:

- 1E. The Unifying Vision--all things are One
- 1I. The Unitary Consciousness; the One, the Void; pure consciousness.
- 2E. The more concrete apprehension of the One as an inner subjectivity, or life, in all things
- 2I. Nonspatial, nontemporal
 3. Sense of objectivity or reality.
 4. Blessedness, peace, etc.
 5. Feeling of the holy, sacred, or divine
 6. Paradoxicality
 7. Alleged by mystics to be ineffable
(Stace, 1960, p. 131 & 132)

Why does Hood say that Stace conceptualized eight categories rather than the nine categories shown above? The answer is very simple. Hood dropped the paradoxical characteristic. While it can not be said for certain why Hood did this, one possibility is that the paradoxical characteristic can be inferred from some of the other characteristics and the paradoxical characteristic can not be tested directly using the type of test that Hood developed.

The categories are as follows:

Ego Quality: Refers to the experience of a loss of sense of self while consciousness is nevertheless maintained. The loss of self is commonly experienced as an absorption into something greater than the mere empirical ego.

Unifying Quality: Refers to the experience of the multiplicity of objects of perception as nevertheless united. Everything is in fact perceived as "One."

Inner Subjective Quality: Refers to the perception of an inner subjectivity to all things, even those usually experienced in purely material forms.

Temporal/Spatial Quality: Refers to the temporal and spatial parameters of the experience. Essentially both time and space are modified with the extreme being one of an experience that is both "timeless" and "spaceless."

Noetic Quality: Refers to the experience as a source of valid knowledge. Emphasis is on a nonrational, intuitive, insightful experience that is nevertheless recognized as not merely subjective.

Ineffability: Refers to the impossibility of expressing the experience in conventional language. The experience simply cannot be put into words due to the nature of the experience itself and not to the linguistic capacity of the subject.

Positive Affect: Refers to the positive affective quality of the experience. Typically the experience is of joy or blissful happiness.

Religious Quality: Refers to the intrinsic sacredness of the experience. This includes feelings of mystery, awe, and reverence that may nevertheless be expressed independently of traditional religious language.

(Hood, 1975, pp. 31-32)

Hood developed four statements (two positive and two negative) for each of the eight categories which were rated on a scale of 1 to 5.

- 1 = This description definitely does not apply to any of my own experiences.
 - 2 = This description probably does not apply to any of my own experiences.
 - 3 = I cannot decide.
 - 4 = This description probably applies to at least one of my own experiences.
 - 5 = This description definitely applies to at least one of my own experiences.
- (Hood, 1975, pp. 31-32)

The raw ratings are then translated into the correct score by the following formula. The negative statements on the Mystical Scale

will be translated into their positive equivalents. This is done by adding four to responses of one; adding two to responses of two; subtracting two from responses of four; and subtracting four from responses of five to the negatively loaded statements. After this procedure has been completed, the new responses are added. Their product is the score of the individuals levels of mysticism. The lowest possible score (least mystical) is 32 and the highest possible score (most mystical) is 160.

Procedure

The subjects were tested during a regular cluster meeting in their usual cluster setting. They received identical test packets containing: a background questionnaire (Appendix A) which asked general questions about the subject, how the subject could be contacted, and an informed consent form with a space for their signature; the Singer-Loomis Inventory of Personality (SLIP) (Appendix B) with its accompanying answer sheet; and Questionnaire 2, the Mysticism Scale, (Appendix C) with its accompanying answer sheet. The subjects also received a sharpened #2 lead pencil to be used during the research.

The researcher read the following statement to the subjects: "The tests you are about to take will not harm you in any way. The Singer-Loomis Inventory of Personality is a cognitive personality inventory. Questionnaire 2 is a scale that identifies experiences that some people have reported."

The researcher then asked the subjects to take out the con-

tents of their packets. The subjects were directed to fill in the Background Questionnaire and to read the directions for the SLIP and the MS tests and to fill in the personal information sections of the test materials. After the subjects completed the preceding directions, they were asked to sign their informed consent statements and to begin the tests. The specific directions that were given to the subjects can be found in Appendix D.

The difference between the laboratory and out-of-lab scores was calculated for each subject. The difference scores ranged from -17 to +17 with a mean of 2.79 (S.D. = 10.5). Figure 1 illustrates that there was a tendency toward laboratory scores for the subjects of the pilot project.

When the male and female scores were analyzed from each other, raw scores and standard deviations were calculated for the male subjects and for the female subjects. The mean for the male subjects was 11.4 (S.D. = 9.6). For the female subjects, the mean was 11.1 (S.D. = 10.0).

A t-test was used to determine if there was a significant difference between the male and female scores. It was found that only

CHAPTER III

Results

Pilot Project

Twenty-one subjects participated in the pilot project. The subjects' mean score for introversion was 141.95 (S.D. 19.76). For extraversion, their mean score was 126.33 (S.D. 26.24). The same scores for the validity study on the SLIP (Templine, 1981) were 143.50 (S.D. 23.68) and 129.84 (S.D. 26.84) respectively. There were found to be eight male introverts, two male extraverts, ten female introverts and one female extravert.

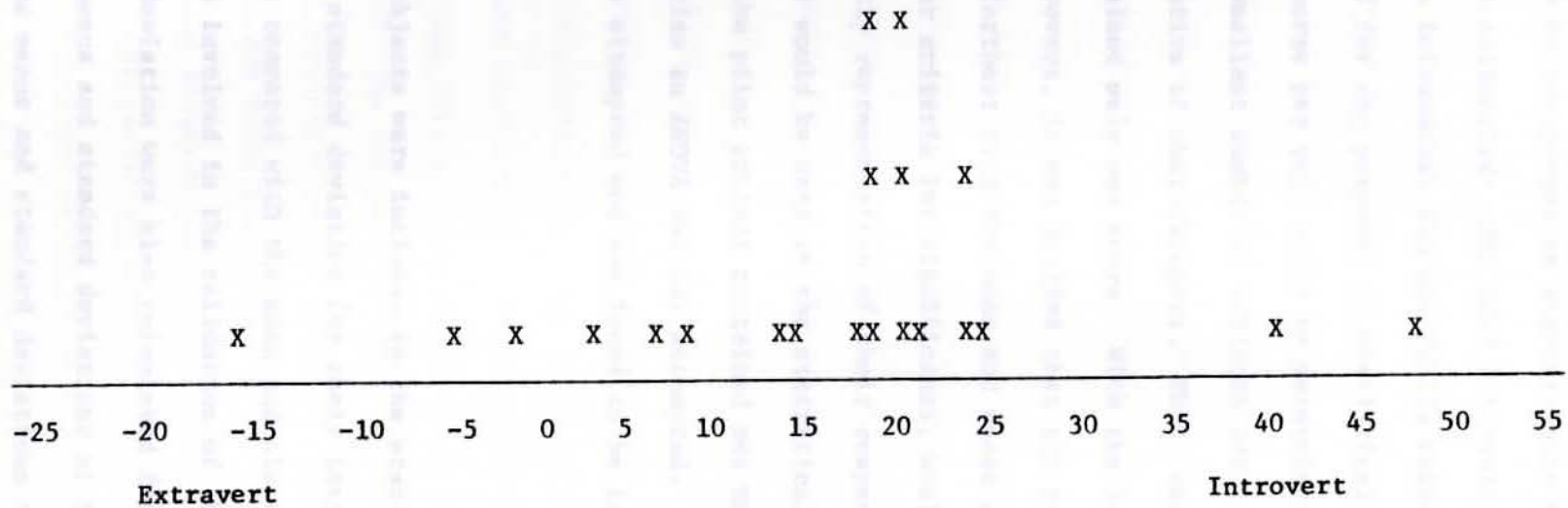
The difference between the introvert and extravert raw scores were calculated for each subject. The difference scores ranged between +47 and -17 with a mean of 15.76 (S.D. 14.05). Figure 1 illustrates that there was a definite skew toward introversion in the subjects of the pilot project.

When the male and female scores were separated from each other, new means and standard deviations were calculated for the male subjects and for the female subjects. The mean for the male subjects was 11.8 (S.D. 9.6). For the female subjects, the mean was 19.4 (S.D. 16.8).

A subject must have a difference score of one standard deviation above or below the mean to be considered significantly representative of one of the four categories. It was found that only

Figure 1

Pilot Project: Graph of Differences



The above graph illustrates the scatter and skew of the difference between the introvert and extravert scores for the twenty-one subjects of the pilot project.

five subjects could be considered as significantly representative of their respective categories: one male introvert, one male extravert, two female introverts, and one female extravert.

It was decided for the purposes of statistical analysis that the number of MS scores per cell would be determined by the SLIP category with the smallest number of subjects identified as significantly representative of that category. Thus, each cell in the pilot project contained only one score. With the larger categories, such as female introvert, it was decided that the subjects with difference scores farthest from the mean and whose difference scores met the other criteria for significance, would be considered as most significantly representative of their respective category and their MS scores would be used in the statistical analysis.

Each cell in the pilot project contained one MS score. Because of the cell size an ANOVA was not attempted. However, a Chi-square test was attempted and was found to be insignificant, $\chi^2 = 0.022$.

Research Project

Ninety-nine subjects were included in the statistical analysis. The mean and standard deviation for their introvert and extravert scores were compared with the mean and standard deviations of the 823 subjects involved in the validation of the SLIP. The mean and standard deviation were also calculated for the MS and compared with the means and standard deviations of the three validation studies. The means and standard deviations of the present

research were found to be similar to those of the validation studies (Table 2).

The difference between the introvert and extravert scores of the ninety-nine subjects of the present study ranged from +39 to -41 with mean of 7.333 (S.D. 15.199). There were 29 male introverts, 13 male extraverts, 38 female introverts, and 12 female extraverts. Three males and four females had difference scores of zero. These subjects were included in calculating the mean and standard deviation.

Figure 2 illustrates the scatter of the difference scores of the research subjects. As with the pilot project, there was a skew toward introversion. However, the skew was not as great with the research subjects as it was with the subjects of the pilot project.

A comparison of the sample population with the total college for individualized education population shows that sixty-seven subjects in the research project were found to be introverts. This is 67.68% of the total usable sample. There were 286 students enrolled in the college during the trimester that the present research was conducted. The subjects included in the research were 34.62% of the total population of the college. This is a large enough percentage of the total population of the college to predict that there is a strong tendency toward introversion among the students enrolled in a college for individualized education.

The mean and the standard deviation were calculated separately for the male subjects and the female subjects to find the

Table 2

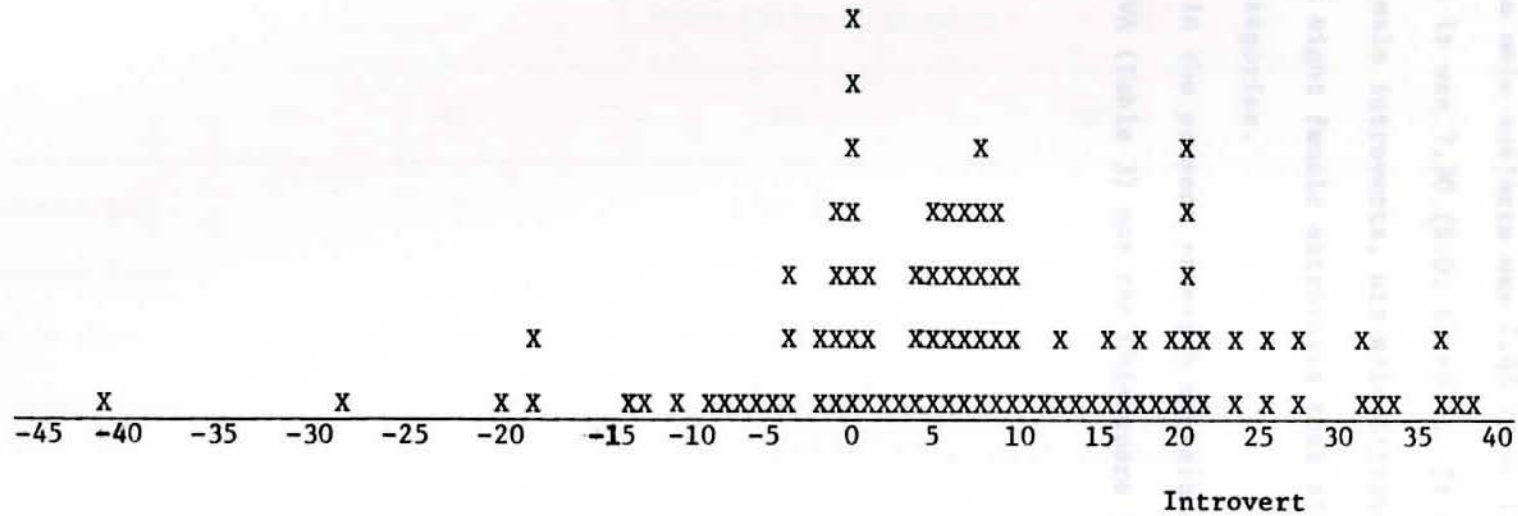
Comparison of Means and Standard Deviations

| Singer-Loomis Inventory of Personality | | | | |
|--|-------------------------|--------|-----------------------------------|--------|
| | Personality & Mysticism | | SLIP Validity Study | |
| | 99 Subjects | | 823 Subjects | |
| | IN | EX | IN | EX |
| Mean | 146.80 | 139.40 | 143.50 | 129.84 |
| S.D. | 21.92 | 23.36 | 23.68 | 26.84 |
| Mysticism Scale | | | | |
| | Personality & Mysticism | | Fundamental Protestant | |
| | 99 Subjects | | 65 Subjects | |
| Mean | 121.08 | | 132.2 | |
| S.D. | 23.33 | | 23.4 | |
| | Fundamental Protestant | | Undergraduate Psychology Students | |
| | 52 Subjects | | 83 Subjects | |
| Mean | 114.90 | | 110.2 | |
| S.D. | 25.5 | | 26.9 | |

The means and standard deviations listed under the heading Personality and Mysticism are from the present research and are provided for comparison with the validity research on the SLIP and the validity research of the MS.

Figure 2

Research Project: Graph of Differences



The above graph illustrates the scatter and skew of the difference between the introvert and extravert scores for the ninety-nine subjects of the research project.

subjects who significantly represent their respective categories. The mean for the male subjects was 7.88 (S.D. 16.99) and for the female subjects it was 7.30 (S.D. 13.697). It was found that there were six male introverts, six male extraverts, ten female introverts, and eight female extraverts that significantly represented their categories.

Each cell in the present research contained six MS scores. Neither the ANOVA (Table 3) nor the Chi-square ($\chi^2 = 2.842$) were significant.

Table 3

ANOVA Table of Results

| Source | df | SS | MS | F |
|---------------|----|----------|---------|------|
| Between Sex | 1 | 1190.04 | 1190.04 | 1.50 |
| Between Type | 1 | 1162.04 | 1162.04 | 1.46 |
| Sex X Type | 1 | 425.06 | 425.06 | .54 |
| Within Groups | 20 | 15866.82 | 793.34 | |
| Total | 23 | 18643.96 | | |

The above ANOVA table gives the results of the present research.

CHAPTER IV

Discussion

Pilot Project

The pilot project was found to be insignificant. It is felt that this insignificance is largely due to the quantitative difference between the number of introverted subjects and the number of extraverted subjects, eighteen and three respectively. With such a small sample of subjects, it seems possible that the extraverted subjects were exceptional subjects with respect to their personality development and/or to their awareness of mystical experiences. It is known, for example, that one of the extraverts has used drugs. The use of drugs, particularly hallucinogens, may enable an extravert to be more aware of mystical experiences than extraverts who have not used consciousness altering drugs.

Research Project

The research project was found to have a larger percentage of extraverts than the pilot project, 25.3% and 14.3% respectively. With increase in the percentage of extraverts, it is expected that there would be a decrease in the mean of the difference score. This decrease was seen with a change in the mean from 15.76 in the pilot project to 7.33 in the research project.

This change in the mean of the difference brings the mean

closer to the theoretical and hypothetical mean of zero. Therefore, it would be expected that the number of subjects having a difference score of zero would increase as the mean of the difference moved closer to zero.

In addition, it would be expected that as the mean of the difference neared zero the difference scores would appear in a normal bell curve. This did not appear to happen.

The results of both the ANOVA and the Chi-square were insignificant. However, the Chi-square showed that there was a tendency for sex and personality type to have an affect on the awareness of mystical experience. There may be a number of reasons for the insignificance in this study.

The MS test came under severe criticism by the subjects of the research. All of the subjects of the pilot project and ninety-six of the 102 subjects of the research project or 95.1% of the subjects of both projects found the MS test to be confusing.

Most of the subjects did not say why they felt the MS test was confusing. Of those subjects who did express their reason(s) for saying that the MS test was confusing, most of them said the negative statements confused them. Others said the scoring system confused them. One subject, a psychometrist, said that the MS test was poorly designed. This comment was not illustrated at the time.

These comments from the subjects suggest that the MS test may not have been developed sufficiently or in a way that was appropriate for these subjects. The degree to which the subject's

confusion affected the results of this research is unknown.

It may be that a number of subjects who scored high on the MS may have used drugs, particularly hallucinogenics, at sometime during their life. If this is true, the subjects may have been rating the statements on the MS in reference to their drug induced state instead of a naturally occurring mystical experience (Dass, 1973). The use of drugs among the students at a college for individualized education is unknown. It is unknown whether the use of drugs affected the research results.

Self-motivation, self-initiation, and self-direction are some of the qualities a student needs to participate in a college for individualized education (Eisendrath, 1975; Mooris, 1975). These qualities are more descriptive of introverts than of extraverts because introverts are self-orienting. Extraverts, on the other hand, are object orienting or other orienting. Thus extraverts must be motivated by someone or something outside of themselves.

It was shown in the results section that the subjects involved in the present research were largely of the introverted type and that the sample population was a large percentage of the total population of the college.

It was hypothesized that introverts would be more aware of mystical experiences than extraverts. Given that the college requires that the students exhibit various introverted behaviors and that the sample population was predominantly introverted, it seems possible that at least some of the extraverts may have become aware of mystical experiences to a greater degree than extra-

verts in the general population.

In the past ten to fifteen years, there has been a growing interest in the United States and other Western countries to study Eastern philosophies, the metaphysical and gnostic traditions of both the East and West, and to practice some form of meditation or contemplation. It is not known whether any of the subjects involved in this research have studied Eastern philosophy, metaphysical or gnostic tradition, and/or meditate. Theoretically, introverts would be more inclined toward this type of study and practice. However, it is not known whether this is a line of study or a behavior exclusive to introverts.

It is evident from the comments of the subjects that the MS needs to be examined and refined so that it would be less confusing for the subjects. In addition, the subjects need to be screened more thoroughly for the use of drugs and the study of Eastern philosophy, etc.

This study, while not statistically significant, has identified a number of areas for further research. The comments of the subjects about the MS indicates that this scale needs to be re-examined and refined. The subjects need to be screened more thoroughly by completing a post test questionnaire containing questions that might otherwise confound the research. A sample from a more generalized population needs to be used in the research.

APPENDIX A

Background Questionnaire

Name:

Age:

Last grade completed:

Occupation:

Degree title and area of study of your present course of study:

Sex:

Address:

Home phone:

Work phone:

I am a volunteer participant in this study and have understood the oral and written instructions. I understand that these questionnaires invoke no risk of harm and that I may terminate my involvement in this study at any time.

Signature

APPENDIX B

Singer-Loomis Inventory of Personality

Introduction

The Singer-Loomis Inventory of Personality is a self-description. It provides you with an opportunity to clarify your own personality as you see it.

There are no right or wrong answers. This inventory is not a measure of intelligence. It is not an indicator of emotional problems. It does not show how well you function in comparison with other people.

What this Inventory is, is a key to understanding the nature of your own habit patterns, your usual ways of approaching tasks or situations. One way of reacting is no better or worse than any other, but there are differences. Each person tends to respond more frequently in some ways than in others.

There is no time limit to this Inventory, but it will be best if you do not mull over the situations. Indicate what you would actually do in a situation such as the one described. We are not interested in what you think you should do, or what is the right think to do. What we are interested in is what you actually would do.

Directions

Do not write in your Inventory booklet.

Mark on the Answer Sheet only.

Place your Answer Sheet with the words SINGER-LOOMIS INVENTORY OF PERSONALITY at the top. Use a soft pencil.

Write your name, last name first, in the spaces provided. Then blacken the corresponding letter under each letter of your name. Write the last name of the person administering the SLIP in the blanks under INVENTORY ADMINISTERED BY. Blacken the corresponding letters.

Complete the information requested below.

Now turn your paper around. Item 1 through 8 are responses for the first question. On a scale from 0 to 4, where 0 is never and 4 is always, fill in a blank that most closely corresponds to what you would do. You must fill in a blank for each of the response possibilities.

Do NOT circle or check your responses.

The second question has responses 9 through 16. Continue filling in a blank for each response possibility until you have answered all 15 questions. You will have marked 120 blanks.

I HAVE A FREE DAY COMING UP THIS WEEK AND WILL BE ABLE TO DO WHATEVER I WANT. I WOULD

1. not plan ahead, but decide on the spur of the moment what to do.
2. participate in some sport with other people.
3. enjoy part of the day working alone on something of real importance to me.
4. try something new with a few friends.
5. get my group together to attend a benefit for a worthwhile charity.
6. do some of the planning and organizing that I have been putting off.
7. call up the theatre and reserve some tickets for a hit show.
8. work on one of my hobbies like gardening, cooking, sewing, painting, woodwork, music, etc.

I AM AT HOME WITH A PERSON I LOVE. WE HAVE JUST FINISHED A PLEASANT EVENING MEAL. I WOULD BE INCLINED TO

9. relax in the arms of my partner.
10. think about how wonderful my partner is to me.
11. enjoy the presence of my partner nearby, while I am working on something of my own.
12. talk about why we do what we do.
13. be especially sensitive for any disturbances in our relationship.
14. share our hopes and dreams for the future.
15. give my partner a back rub.
16. allow my mind to wander freely and see what comes up.

IF I HAD TO COME UP WITH A SUGGESTION FOR IMPROVING SCHOOLS IN MY COMMUNITY, I WOULD

17. clarify my objectives and outline a step-by-step progression toward my goals.
18. ask myself what kind of school I would like to attend.
19. suggest that we as a group examine the causes of our difficulties and determine what ought to be done about them.
20. interview students so we can make sure that their needs will be met.
21. study carefully the present school budget and course of studies.
22. work on a fact-finding committee which would check on possible leakage of funds in such places as the cafeteria, bookstore, etc.
23. first, want to consider what the purposes of the schools really are.
24. get together with some people to find original ways of raising money for the schools.

I SEE A REPORT ON TELEVISION ABOUT A CATASTROPHE IN A DISTANT LAND. I WOULD

25. volunteer to contact my neighbors for contributions for relief for the victims.
26. advocate a commission to inquire into exactly what occurred and what the situation is now.
27. want to hear all about it, no matter how gory it is.
28. wonder what is happening to the victims.
29. read the paper for further details.
30. wonder what I would do if I were caught in such a situation.
31. discuss with my friends what steps should be taken to deal with the situation.
32. try to figure out what brought this about.

I COME HOME AFTER A HARD DAY AT WORK, TIRED AND DEPRESSED. I WOULD BE LIKELY TO

33. reflect on how I might change my way of handling things tomorrow.
34. discuss with another person a problem that arose during the day, and try to determine together why it happened.
35. enjoy some good music.
36. get away from others and try to figure out what went wrong.
37. sit down and read the paper.
38. share with others the things that are bothering me.
39. imagine what things could be like at work if only we could solve some of the things a few of us have discussed.
40. go with someone for entertainment such as dinner and a show.

WE'VE HAD THREE MONTHS OF INTOLERABLE WEATHER. I LOOK OUT THE WINDOW ON A WEEKEND MORNING AND SEE MORE OF THE SAME. I WOULD

41. gather up my snapshots and paste them in an album.
42. make the best of it by entertaining myself at home with good food, drink, TV, book, music, hobbies.
43. use the time to do some paper work that I should have done long ago.
44. play a game like Monopoly, Chess, or Bridge.
45. thumb through the travel section of the paper and daydream about where I'd like to be going.
46. start some projects that need to be done around the house and get others to help.
47. call up some friends to join me in some physical sport.
48. decide I might as well enjoy it and invite friends to dinner.

I AM AWARE THAT I DO NOT HAVE AS MUCH CONTROL AS I WOULD LIKE OVER A CERTAIN HABIT (FOR EXAMPLE: SMOKING, ALCOHOL, DRUGS, OVEREATING, OVERWORKING). MY RESPONSE TO THIS INSIGHT WOULD BE

49. say, "Eat, drink and be merry, for tomorrow we die."
50. seek professional help.
51. forget it, and get out with people who are doing something interesting.
52. wonder what I can do to change my behavior.
53. become aware of what I'm doing to my body.
54. join a self-help group that records people's progress regularly.
55. become depressed and wish that I could do something about it.
56. set up a daily plan that would reward myself as I change my behavior.

IF I HAD THE OPPORTUNITY TO ENGAGE IN ANY VOCATION I WOULD LIKE, AND TRAINING FOR IT WERE AVAILABLE, I WOULD CHOOSE TO

57. work with a skilled crew building or repairing equipment.
58. be in a position to influence people toward accepting my beliefs.
59. seek a position that would allow me to realize my full potential.
60. be in a position where I could organize my work for maximum efficiency.
61. work in an environment with people who would stimulate each other to create new ideas.
62. be a member of an investigating and problem solving team in a large organization.
63. work alone with figures, computers, or other instruments allowing exact methods and answers.
64. work independently in a pleasant environment.

I WAKE IN THE NIGHT. THE FIRE ALARM IS GOING OFF AND I SMELL SMOKE. SOMEONE IS IN THE NEXT ROOM. I WOULD

65. check the routes of escape.
66. pick up the phone next to my bed and call the fire department.
67. open the window and shout for help.
68. try to get out as fast as I can.
69. try to put out the fire with any means at hand.
70. rush into the person's room.
71. determine the source of the fire and take practical measures to put it out-- if possible.
72. follow the guidelines issued by the fire department.

MY FAMILY IS LOVING AND SUPPORTIVE, BUT THEY DON'T UNDERSTAND WHAT I AM GOING TO DO. I WOULD

73. tell them how important this is to me.
74. let them see how I have already worked out all the practical details, so it must work.
75. show the value of this undertaking for people other than myself.
76. give them names of people involved in this to strengthen my position.
77. help them to visualize how it will affect them in the end.
78. point out to them the possibilities for me if I follow this course of action.
79. explain why I have not done this in the past but should do it now.
80. acknowledge to them that since there are both pros and cons to this undertaking, it required careful consideration.

I AM OBLIGED TO WORK ON A PROJECT WITH A CO-WORKER I DON'T LIKE. I WOULD

81. try to determine ways in which we can reasonably work together.
82. tell my co-worker what is going to be the outcome of the task when we work under these conditions.
83. have great difficulty in getting through my personal objections.
84. concentrate my efforts on the project, not the person.
85. keep quiet and figure out how to get out of the situation as quickly as possible.
86. use this as an opportunity to discover why I don't get along with this person.
87. say, "Let's get it done no matter what."
88. say, "Let's recognize what our differences are and divide the labor accordingly."

I HAVE JUST BEEN TOLD ON THE TELEPHONE THAT SOMEONE VERY CLOSE TO ME HAS DIED SUDDENLY. I WOULD

89. wonder what the long range effects of this person's death will be.
90. arrange a telephoning plan to notify relatives and friends.
91. begin imagining how this will change my life.
92. inquire about the funeral arrangements.
93. offer to meet with the person who will conduct the funeral and outline the life of the deceased.
94. thank the person who called and offer my sympathy.
95. suggest practical ways in which I can help with immediate problems.
96. be concerned about how it is going to affect my family.

I AM GOING SHOPPING TO BUY SOME CLOTHING FOR MYSELF. MY BUDGET IS LIMITED, I WOULD

97. make a purchase as soon as I found something that appealed to me.
98. visualize myself wearing an outfit that would win admiring glances.
99. choose clothes from workmanship, fabric and color.
100. select something fashionable that I really feel good in.
101. take a friend with me and weigh the friend's views against my own before I buy anything.
102. shop in many stores to see what is available before making my purchase.
103. sit down and plan what I need and budget how much to spend on each item.
104. get it over with as quickly as possible.

I WAKE UP FEELING SICK. I HAVE MADE SEVERAL COMMITMENTS FOR TODAY. I WOULD

105. lie there and wonder what is happening where I am supposed to be.
106. recall from past experience that the only logical thing to do is call the doctor.
107. grit my teeth and go to work, knowing that certain things need to be done.
108. ask for a little tender loving care.
109. give in to my feelings because it is the right thing to do under the circumstances.
110. postpone my commitments, take a warm bath, have something to drink, and listen to some music.
111. worry that maybe some people will think that I am not able to do my job and maybe they will find someone else.
112. call the people and explain why we will have to postpone our plans.

I AM INVOLVED IN AN ARGUMENT WITH AN OLDER MEMBER OF MY FAMILY OVER SOMETHING I WANT TO DO, BUT THAT PERSON DISAPPROVES. I WOULD

113. present reasons why my position is justified.
114. consider the other person's arguments and weigh the evidence before I act.
115. gather all the facts together and then point them out.
116. worry about what might happen if I don't get my way, and try to think up some alternatives.
117. explain in detail what the results will be when I do what I have proposed.
118. listen politely to the other person, but do what seems best to me.
119. tell the other person exactly where I stand, then do what I want.
120. point out, using many examples, that my friends and other people are doing this.

APPENDIX C

Mysticism Scale

Instructions: Following are brief descriptions of a number of experiences. Some refer to phenomena that you may have experienced while others refer to phenomena you may not have experienced. In each case note the description carefully and place a mark in the left margin according to how much the description applies to your own experience. Write 5, 4, 3, 2, or 1 depending on how you feel in each case.

5 = This description definitely applies to at least one
of my own experiences.

4 = This description probably applies to at least one
of my own experiences.

3 = I cannot decide.

2 = This description probably does not apply to any of
my own experiences.

1 = This description definitely does not apply to any
of my own experiences.

EXAMPLE: ___ 0. I have had an experience in which I felt excited.

If you felt that you had definitely had at least one experience in which you felt excited, you would mark "5" in the blank to the left of the statement. This would signify that you thought the statement definitely applied to at least one experience you had had:

5 0. I have had an experience in which I felt excited.

Please understand that the items may apply to just one experience or to several different experiences. After completing the questions, please be sure that all items have been marked--leave no items unanswered.

1. I have had an experience in which I felt that I was being expressed or made manifest.
2. I have had an experience in which I felt that I was being expressed or made manifest.
3. I have had an experience in which I felt that I was being expressed or made manifest.
4. I have had an experience in which I felt that I was being expressed or made manifest.
5. I have had an experience in which I felt that I was being expressed or made manifest.
6. I have had an experience in which I felt that I was being expressed or made manifest.
7. I have had an experience in which I felt that I was being expressed or made manifest.
8. I have had an experience in which I felt that I was being expressed or made manifest.
9. I have had an experience in which I felt that I was being expressed or made manifest.
10. I have had an experience in which I felt that I was being expressed or made manifest.
11. I have had an experience in which I felt that I was being expressed or made manifest.
12. I have had an experience in which I felt that I was being expressed or made manifest.
13. I have had an experience in which I felt that I was being expressed or made manifest.
14. I have had an experience in which I felt that I was being expressed or made manifest.

- _____ 1. I have had an experience which was timeless and spaceless.
- _____ 2. I have never had an experience which was incapable of being expressed in words.
- _____ 3. I have had an experience in which something greater than myself seemed to absorb me.
- _____ 4. I have had an experience in which everything seemed to disappear from my mind until I was conscious only of a void.
- _____ 5. I have experienced profound joy.
- _____ 6. I have never had an experience in which I felt myself to be absorbed as one with all things.
- _____ 7. I have never experienced a perfectly peaceful state.
- _____ 8. I have never had an experience in which I felt as if all things were alive.
- _____ 9. I have never had an experience which seemed holy to me.
- _____ 10. I have never had an experience in which all things seemed to be aware.
- _____ 11. I have had an experience in which I had no sense of time or space.
- _____ 12. I have had an experience in which I realized the oneness of myself with all things.
- _____ 13. I have had an experience in which a new view of reality was revealed to me.
- _____ 14. I have never experienced anything to be divine.

- ___ 15. I have never had an experience in which time and space were non-existent.
- ___ 16. I have never experienced anything that I could call ultimate reality.
- ___ 17. I have had an experience in which ultimate reality was revealed to me.
- ___ 18. I have had an experience in which I felt that all was perfection at that time.
- ___ 19. I have had an experience in which I felt everything in the world to be part of the same whole.
- ___ 20. I have had an experience which I knew to be sacred.
- ___ 21. I have never had an experience which I was unable to express adequately through language.
- ___ 22. I have had an experience which left me with a feeling of awe.
- ___ 23. I have had an experience that is impossible to communicate.
- ___ 24. I have never had an experience in which my own self seemed to merge into something greater.
- ___ 25. I have never had an experience which left me with a feeling of wonder.
- ___ 26. I have never had an experience in which deeper aspects of reality were revealed to me.
- ___ 27. I have never had an experience in which time, place, and distance were meaningless.

- _____ 28. I have never had an experience in which I became aware of a unity to all things.
- _____ 29. I have had an experience in which all things seemed to be conscious.
- _____ 30. I have never had an experience in which all things seemed to be unified into a single whole.
- _____ 31. I have had an experience in which I felt nothing is ever really dead.
- _____ 32. I have had an experience that cannot be expressed in words.

APPENDIX D

Researcher's Instructions to the Subjects

"Please take out the materials contained in your packets. Do not write in either of the test booklets. Use only the pencil that was provided to you. Fill in the information requested at the top of the background questionnaire. Do not sign the informed consent statement until I tell you to do so."

When the subjects have completed the questionnaire, the researcher will say: "Turn to the Singer-Loomis Inventory of Personality. Read the introduction page and the directions page. Then fill in the information requested by the first six paragraphs of the directions page. The SLIP answer sheet should look like this (show example of the SLIP answer sheet). When you have completed this stop."

When the subjects have completed the previous instructions, the researcher will then say: "Now look at the Questionnaire 2 answer sheet. Please write your name in the designated area. Now read the first page of the Questionnaire 2 booklet."

After the subjects have completed this task, the researcher will say: "Are there any questions about the directions? (If there are any questions, the researcher will read the pertinent instructions). If there are no (additional) questions, you may sign the informed consent statement. There is no time limit on

this test, but do not dwell on the descriptive statements nor leave any statements unanswered. After you have completed your tests, please return all of the test materials to me. Your names will not be used in the research. Your names and addresses are needed so that you can be notified of your personal results."

"Please do not tell other LCIE (Lindenwood College for Individualized Education) students about these questionnaires. If you would like additional information about the research, I will answer your questions after you have finished. You may now begin."

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