PRONENESS TO MYSTICAL EXPERIENCE IN RELATION TO
JUNG'S PERSONALITY DIMENSIONS

A Thesis
Presented to
The Division of Psychology
and Special Education
EMPORIA STATE UNIVERSITY

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Joel E. Matthews
August, 1990
The present study was designed to investigate the relationship of mystical experience to the personality dimensions as theorized by Jung. There were 44 subjects, both upper class and freshmen.

Each subject completed the M-scale, Research Form D and the Myers-Briggs Type Indicator. Subjects also provided demographic data.

The results were obtained by comparing the scores from the M-scale between Introverts and Extroverts, between Thinkers and Feelers, and between Sensors and Intuitors as indicated by the Myers-Briggs Type Indicator. Only those data obtained from subjects scoring above a slight preference on the Myers-Briggs Type Indicator were used in the analysis.

The results indicated that there was no significant difference between Introverts and Extroverts or between Sensors and Intuitors in their reported proneness to mystical experience. There was a significant difference between Thinkers and Feelers in reported proneness to
mystical experience with Feelers reporting a significantly greater proneness to mystical experience.

It was concluded that the functions within the subjects' personality associated with judging and decision making based on personal values were the primary factors in the report of being prone to mystical experience. This conclusion was consistent with the research literature on mysticism.
### TABLE OF CONTENTS

List of Tables......................................................iv

CHAPTER

1. INTRODUCTION.............................................1
   Statement of the Problem.................7

2. METHOD.....................................................10
   Sample..............................................10
   Instruments.......................................10
   Procedure.........................................12

3. RESULTS.................................................14

4. DISCUSSION..............................................16

REFERENCES..................................................18
LIST OF TABLES

TABLE                        PAGE

1. ANOVA COMPARING MEAN M-SCALE SCORES..............14
Approved for the Graduate Council
ACKNOWLEDGMENTS

I wish to extend my sincere gratitude to Dr. Cooper B. Holmes for his support and professional guidance. His work and input on this project have been invaluable. I would also like to extend my thanks to Dr. David Dungan for his work on this project and many other things. And to the final member of my thesis committee, Dr. Loren Tompkins, I wish to extend my sincere gratitude for his statistical expertise, his persistent enthusiasm, and encouragement in my future professional endeavours.

An additional thank you is given to my family, without whose continual support and shelter, I would never have been able to do this in the first place.
CHAPTER 1
INTRODUCTION

Psychology is in the midst of yet another change in emphasis. Traditionally, there have been three major forces in the field: psychoanalysis, behaviorism, and humanism. Walsh and Vaughn (1980) recognized the change in the scope of psychology and identified the new thrust as transpersonal psychology. This field drew its origins from humanistic psychology in the 1960's and has since become a field in its own right. This new field holds as a basic premise that there are many ways to knowledge besides those experiences of normal waking conscious activity, and places much emphasis on various states of consciousness. The focus is to study and understand experiences of transcending the self and identifying with larger goals or systems—an expansion of normal consciousness beyond individual ego boundaries, temporal limits, and spatial confines. Transpersonal psychology examines the merits of belief systems and relies heavily upon phenomenology (which focuses on the development and maintenance of self-awareness) and metaphysics (which focuses on the fundamental nature of reality and existence).

Transpersonal psychology invests a great deal of interest in mysticism as it is considered an altered state of consciousness; indeed, Walsh and Vaughn (1980) noted that it is one of the major topics in the field. Mysticism
is a very wide and diverse topic. Generally, the mystic is one who seeks forms of knowledge, not readily attainable, by experiencing a union or confrontation with what is perceived to be an ultimate force. Some interpret this force as a supreme unity, some as God, others as some form of species-wide consciousness. A hallmark of this experience is that it is supremely subjective, meaning that only the person having the mystical experience (ME) understands the meaning behind it.

In psychology, the study of mysticism focuses on the mystical experience, not mysticism per se as that belongs in the realm of religion. The study of the ME requires a definition. This definition is one that was proposed by the philosopher W. T. Stace (1960):

1. It is a valid source of knowledge.
2. It is not adequately put into words.
3. It is religious in nature, but not particular to any theology.
4. It is pleasant.
5. It defies logic.

The topic of mysticism in the psychology of religion was heavily studied in the early times of American psychology (Spilka, Hood, & Gorsuch, 1985). Although most of these psychologists thought that the mystical experience was pathological in nature, there were others (James, 1902) who viewed the experience as yielding valid knowledge.
The study of mysticism, and religion in general, all but died when American psychology adopted a more scientific approach, using the natural sciences as models. With this emphasis on empiricism, it was believed that mysticism could not be adequately studied with scientific methodology. This issue was discussed by Hood (1987), Hubbard (1956), and Spilka, Hood, and Gorsuch (1985). However, in the 1970's, the psychology of religion "came full circle" (Spilka, Hood, & Gorsuch, 1985, p. 176).

Since the 1970's, the psychology of religion has developed a paradigm in measurement. This paradigm was described by Gorsuch in 1984. He reported that measurement in the psychology of religion places emphasis on the construction and validation of instruments, relies on questionnaires that are highly variable in content and emphasize the use, not content of religion, and makes little emphasis on religious membership as it is assumed that members of the same religious group vary considerably in personal beliefs. He concluded his description by saying that this measurement area has "produced reasonably effective instruments...[with]...good content and predictive validity as well as usable reliabilities" (p. 234). The work of Stace (1960) on mysticism was cited by Spilka, Hood, and Gorsuch (1985) as providing the groundwork on which to build empirical studies of mysticism. In fact, Hood and Morris (1981) showed that the majority of empirical
studies of mysticism have relied either directly or indirectly on the works of Stace.

The empirical assessment of mysticism would seem to present difficulties as ME itself is by definition so subjective that defining it with language constructs seems inadequate to those who have experienced it. However, the distinction between assessing the content of the ME versus assessing the occurrence of the ME itself becomes crucial in this respect. Any assessment of the content of the ME is purely phenomenological in nature and relies heavily upon attribution processes. On the other hand, assessing only the occurrence of the ME is a simple process in that the answer is either yes or no. Most methodology goes beyond that simple level to distinguish between those who have had frequent MEs and those who have had infrequent MEs.

One instrument developed for the empirical assessment of the ME is a scale called the M-scale (Hood, 1975). This scale has 30 items that are representative of the eight categories of mysticism proposed by Stace (1960). Research Form D of the M-scale was tested on 300 undergraduate college students by Hood (1975). He found that the instrument acceptably correlated with three other independent measures of ME. These other instruments measured openness to experience, intrinsic religious orientation, and intense religious experience. Conclusions
indicated that this device was a valid measure of the occurrence of MEs.

Hood (1978) used the Religious Experience Episodes Measure (REEM) (Hood, 1970), the Repression-sensitization Scale (Byrne, 1964), and the Intrinsic-Extrinsic Orientation Scales (Allport & Ross, 1967) on undergraduate college students. He concluded that the subjects scoring high on the REEM also were indiscriminately proreligious.

Caird (1987) used the Eysenck Personality Questionnaire (EPQ) (Eysenck & Eysenck, 1975) on 115 college students. This device measures introversion-extroversion, neuroticism, and psychoticism; it also contains a lie scale. In trying to correlate results from this questionnaire to a measure of reported ME, he found no positive results and could make no predictions using multiple regression techniques. He concluded that mysticism was not a function of the personality factors measured by the EPQ.

Thomas and Cooper (1980) sampled from college, civic, and religious groups. Using a personality inventory and a report for ME, they found that 34% of their sample reported some form of ME. Personality scales from these subjects indicated that they were significantly more open to new experience and tolerant of ambiguous situations than their cohorts.

Hood, Hall, Watson, and Biderman (1979) used a sample of 118 undergraduate college students and administered
the Mysticism Scale, Form D and the Jackson Personality Inventory (Jackson, 1976) to them. Those subjects reporting MEs were found to have personalities that were significantly more complex, innovative, socially adept, tolerant, and possessing a larger breadth of interest that subjects who did not report having MEs.

Using a sample of 158 Canadian university freshmen, Wiebe and Fleck (1980) administered the Religiosity Scale (Allport, 1967) and the Sixteen Personality Factor Questionnaire (16PF) (Cattell, Eber, & Tatsuoka, 1970). The personality profiles as measured by the 16PF were found to differ significantly in the intrinsically religious subjects from those of both the extrinsically religious and the nonreligious. Those determined to be intrinsically religious had personality variables of superego strength, emotional sensitivity, and liberalism in a significantly higher degree than the other two groups.

McClain (1978) also differentiated his subjects into groups using the Religious Orientation Inventory (Allport, 1968), but used only intrinsically religious and nonreligious categories. These subjects were also administered the Edwards Personal Preference Schedule (EPPS) (Edwards, 1959), and California Personality Inventory (Gough, 1957; Megargee, 1972), and the 16PF (Cattell, Eber, & Tatsuoka, 1970). McClain used factor analysis to derive eight factors from the combined subscales of the three
personality tests. The two groups were found to differ significantly on five of the eight factors. The intrinsically religious had higher self control, personal and social adequacy, and stereotyped femininity. The nonreligious were found to have higher levels of restlessness and egocentric sexuality.

Bergin, Masters, and Richards (1987) utilized the Religious Orientation Inventory (Allport, 1968). They correlated the results of this scale to measures of anxiety and personality from their subjects. They found that the intrinsically religious had low correlations with anxiety and high correlations with self control and "better" personality functioning. The opposite was true for the extrinsically religious subjects. The researchers concluded that the intrinsically religious had more "normal" personality functioning.

In summary, persons reporting having MEs have been found to have personality variables such as openness to experience, tolerance of ambiguity, complexity, innovative tendencies, liberalism, self-control, and emotional sensitivity. Research has indicated no relationship between ME and psychopathology. In relation to specific issues in religion, ME has been positively linked to being indiscriminately proreligious, having an intrinsic religious orientation, and having generally intense religious experiences as measured by the REEM (Hood, 1978).
Statement of Problem

The problem addressed by this study was the assessment of preferences in perception and judgment in relation to MEs. Previous studies have been conducted that were very similar to the proposed study; however, most of these had focused on other aspects of personality rather than an assessment of perception and judgment. Research projects have measured the degree of pathology within a personality, various personality traits, and personality factors.

The assessment of personality with different forms of personality tests is an important factor in obtaining a comprehensive understanding of those personality types particularly susceptible to ME. Thus it is important to make use of those personality inventories not yet used in this area.

A survey of recent literature assessing personality in conjunction to mysticism yielded no research done with the Myers-Briggs Type Indicator (MBTI) (Briggs & Myers, 1977). This presented two issues in this area. First, this represented the failure to make use of one of the more popularly used personality inventories in the literature (Tzeng, Outcalt, Boyer, Ware, & Landis, 1984). The growing use of this inventory has been taken to represent a convergence of researchers and practitioners in psychology (McDachowski, 1987). Second, and more
importantly, this inventory yields information descriptive of the underlying personality attributes and functioning rather than an assessment of specific traits. More specifically, this inventory can be used to place a subject on four independent continua which represent the personality typology as theorized by Jung (1971). These continua evaluate the preferred orientation to life, the preferred way of perceiving things, the preferred way of making judgments, and the preferred way of dealing with the outer world (Carlyn, 1977). The significance of evaluating a personality with this instrument is that it reveals something about the basic functioning of personality, specifically one's preference to use different forms of perception and judgment.
CHAPTER 2

METHOD

Sample

The sample consisted of 30 women and 14 men drawn from introductory level psychology classes. Class sections were selected on the basis of instructor permission. The sample consisted of 26 freshmen, 8 sophomores, 5 juniors, 4 seniors, and one person who did not indicate classification. The age range was from 18 to 46 years. The mean age for women was 21.46 (SD = 5.52) and the mean age for men was 23.29 (SD = 8.80).

Instruments

Mysticism Scale, Form D

This scale was developed by Hood in 1975. This scale has 30 items that represent the concepts of mysticism proposed by Stace (1960). Items are stated in both positive and negative forms to prevent answer sets from the subjects. Subjects respond to each item with either + or - 1 or 2 depending on how much they agree or disagree with each item; also, subjects are given the option to answer with a "?" if they are unsure. The resulting score will be within the range of 30 to 150. Higher scores indicate the subjects report having experienced more indicators of mystical experience (ME) than lower scores. Thus, the higher the score, the greater the proneness to ME.
Personality Inventory

The Myers-Briggs Type Indicator (MBTI) (Briggs & Myers, 1976) was used in this study. This inventory was first developed in 1942 by Isabel Myers and Katharine Briggs as an attempt to sort people into the personality types as theorized by Carl Jung. It was developed with the notion that people have a preference for one or the other pole on each of four continua. The four continua were defined by Myers and McCaulley (1985) as follows:

1. Extroversion <-> Introversion (EI): a measure of the orientation to life.
2. Sensing <-> Intuitive (SN): a measure of the preferred way of perceiving things.
3. Thinking <-> Feeling (TF): a measure of the preferred method to make decisions.

This inventory is a paper and pencil instrument wherein the subject is presented with a series of 126 paired options. The subject is placed into a forced choice situation in every pairing. Social desirability and gender difference effects are controlled for by differential weighting of responses. The responses are scored resulting in four pairs of scores for each subject in which the larger of the pair indicates the subject's preference on each of the four continua. The score for each continua is then
converted to a preference score through the use of conversion tables. The preference scores can range from 1 to 67 where lower scores represent only slight preferences. To control for regression toward the mean, those subjects with any preference score below 11 (classified as slight preferences) were not used in this study. Thus, of the initial 113 students surveyed, only 44 obtained all preference scores of 11 or higher. Consequently, each subject was placed within four of eight categories; i.e. I or E, S or N, T or F, and J or P. Although each subject was placed in four categories, only the data from three categories was used due to the fact that some research (Carlyn, 1977; Carlson, 1985) has shown the JP continuum to display an unacceptable level of intercorrelation with the SN continuum. Accordingly, only the data from the EI, SN, and TF continua were used in the analysis.

Form G of the MBTI was employed. This form was first published in 1977 following standardization reported by Myers and McCaulley (1985). Research on the validity and reliability of this device indicate it presents acceptable measures of both (Thompson & Borrello, 1986; Carlson, 1985; Myers & McCaulley 1985; Tzeng, Outcalt, Boyer, Ware, & Landis, 1984; and Carlyn, 1977).

**Procedure**

The instruments were group administered during
regular class time and took 20-45 minutes to complete. Subjects were obtained on a volunteer basis. A script for the researcher to read in the process of data collection was prepared to ensure the process was consistent (see Appendix A). This script was used during each period of data collection. Subjects were instructed to follow the respective directions printed on each instrument.

All subjects were required to read and sign an informed consent form (see appendix B) which the researcher read aloud to ensure the subjects understood the form. Subjects were also required to provide demographic data including: student identification number (for identification only), age, sex, religious affiliation, and academic standing (see Appendix C). Subjects then completed the MBTI and finally the Mysticism Scale, Form D. The construction of the packets given each subject ensured consistent order of completion. This concluded the data collection phase of the study.
CHAPTER 3
RESULTS

A two-way ANOVA was first employed to test for differences between personality types (as measured by the Myers-Briggs Type Indicator) in proneness to mystical experience. Due to the scatter of data, only the Extroversion-Introversion (EI) and Thinking-Feeling (TF) continua could be analyzed in the ANOVA. The results of the ANOVA are presented in Table 1.

Table 1
ANOVA Comparing Mean M-Scale Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>181.73</td>
<td>1</td>
<td>181.73</td>
<td>0.55</td>
<td>.46</td>
</tr>
<tr>
<td>TF</td>
<td>1551.02</td>
<td>1</td>
<td>1551.02</td>
<td>4.72</td>
<td>.04</td>
</tr>
<tr>
<td>EI x TF</td>
<td>1135.13</td>
<td>1</td>
<td>1135.13</td>
<td>3.45</td>
<td>.08</td>
</tr>
<tr>
<td>ERROR</td>
<td>5590.40</td>
<td>17</td>
<td>328.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>8458.29</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean M-scale score for the 23 Extroverts was 100.81 (SD = 21.64), and the mean M-scale score for the 21 Introverts was 104.22 (SD = 20.88). Analysis of the variance indicated no statistically significant difference between Introverts and Extroverts in proneness to ME, $F(1, 17) = .55, p<.47$. The mean M-scale score for the 19 Thinkers was 94.58 (SD = 23.24), and the mean M-scale
score for the 25 Feelers was 108.68 (SD = 17.49). Analysis of the variance indicated a statistical significant difference between Thinkers and Feelers in proneness to ME, \( F(1, 17) = 4.72, p < .04 \). The analysis also indicated no statistically significant interaction between EI and TF in proneness to ME, \( F(1, 17) = 3.45, p < .08 \). Thus while there was no statistically significant difference between Extroverts and Introverts in reported proneness to ME, there was a statistically significant difference between Thinkers and Feelers with Feelers reporting a greater proneness to MEs than Thinkers.

The analysis of the Sensing-Intuiting (SN) continuum was conducted through the use of a t test. The 23 Sensors (mean M-scale score = 102.48, SD = 22.45) did not statistically differ from the 21 Intuiters (mean M-scale score = 102.71, SD = 20.07) in a significant way in their proneness to ME, \( t (42) = -.036 \). Thus the analysis revealed there was no difference in reported proneness to MEs between Sensors and Intuitors. Gender differences were not analyzed.
CHAPTER 4

DISCUSSION

Previous research on proneness to mystical experience (ME) has incorporated many personality inventories. Those studies related ME to personality variables such as openness to experience, tolerance of ambiguity, complexity, innovative tendencies, liberalism, self-control, and emotional sensitivity. However, they did not address the issues of perception and judgment functions of personality. The present study was an effort to investigate how these functions relate to proneness to ME through the use of the Myers-Briggs Type Indicator (MBTI) and the M-Scale, Research form D.

This study demonstrated that the personality dimensions theorized by Jung (as measured by the MBTI) may not be accurate predictors in determining one's proneness to ME. It was indicated by the results of this study that there is no difference in proneness to ME between Introverts and Extroverts, which supports the research of Caird (1987). This study also indicated there is no difference in proneness to ME between Sensors and Intuitors. This result may be due to the fact that either no true difference exists between Sensors and Intuitors in their proneness to ME, or that the statistical tool used to investigate the possible difference was not powerful enough to detect a true difference.
There was evidence from the present study indicating that Feelers were more likely to report proneness to ME than Thinkers. Accordingly, with particular reference to perception and judgment, it seems that perception (as measured by the Sensing-Intuiting continuum) is not a determining factor in proneness to ME; rather, proneness to ME is a function of judgment (as measured by the Thinking-Feeling continuum). This implies that those people whose judgment is based on personal values and feelings are more prone to report ME than those people who rely on an objective standard of truth on which to base their judgments. Thus, the results of this study are congruent with the results of Hood, Hall, Watson, and Biderman (1979), and Wiebe and Fleck (1980), as reported in Chapter 1.

It should be noted that the results of the measure of ME (the M-scale) should be interpreted as indicating proneness or an inclination towards experiencing an ME, not of actually having had an ME. This is an important distinction in that the phenomenon itself, the ME, was not directly assessed in this study.

Future research in this area may benefit from this study. First, if the MBTI is to be used, it would be advantageous to draw a larger sample than was used in this study due to the high attrition of subjects, and to insure large numbers of subjects of each of Jung's personality types. Second, future research may benefit from drawing
samples from a variety of populations, especially different religious sects. This would enable the researcher to study the dynamics of different religious denominations and how they relate to ME. Last, the results of this study indicate that future research based on value systems could prove fruitful. Such research may be able to investigate how ME relates to ethical and moral systems and their development, the influences of parenting styles, drug abuse, or even aesthetic systems and their expression.
REFERENCES


APPENDIX A

RESEARCHER'S SCRIPT

My name is Joel Matthews, and I'm a graduate student here at Emporia State working on my master's degree in psychology. Right now I'm working on my thesis. I'm going to hand out some materials that I would like you to fill out for me as data for my thesis. Please do not look through the things until you have received further instructions. (Researcher then hands out materials.)

The first page you have is a consent form. Please read this along with me. (Researcher then reads the consent form.) Is there anyone who does not want to participate? (If someone has an objection, their materials will be gathered.) Please fill out the consent form, and be sure to put your student I.D. number on it, that is how I will be able to identify you in my study. The next page is for some demographic data. Please fill in each blank on the sheet. The next page is the answer sheet for a standardized instrument. Instead of filling out all the blanks it has, please just place your student I.D. number in the boxes where your name would go. Leave the rest of those boxes empty. This sheet is what you will use to put your answers on from the booklet. Before you start answering questions from the booklet, please make sure you place your I.D. number on the last packet, also. The last packet is simple to complete. Are there any questions before we begin? Please go ahead and complete both the booklet and the packet now. Do not put any marks in the booklet. If you have any questions during this, please raise your hand and I will come to you.
APPENDIX B

INFORMED CONSENT FORM

Please Read the Following:

This form is to inform you (the subject) about the experiment in which you may take part. The purpose of this study is to investigate the relationship of personality to certain experiences. In taking part in this study, you will be required to fill out a demographic sheet about yourself, complete a personality inventory, and complete another scale about various experiences you may or may not have had. This will take you about thirty to forty-five minutes. Your name will not appear on any of the data--your confidentiality is assured. You may withdraw from this experiment at any time without repercussion of any kind; that is, if you feel uncomfortable in completing the forms, you can quit without consequences.

If you have any questions, contact me, Joel Matthews at campus extension 5803.

I, __________________________ have read the above passage and understand it fully. By signing below, I agree to take part in this experiment.

X __________________________

student ID number: _____-____-_______
APPENDIX C
DEMOGRAPHIC SHEET

Student I.D. Number: __________________________

Age: ______

Sex: ________

Academic Standing: _______________________

Religious Affiliation: ______________________