

The Construction and Preliminary Validation of a Measure of Reported Mystical Experience*

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A measure of reported mystical experience is presented. This *Mysticism Scale, Research Form D (M scale)*, has 32 items, four for each of 8 categories of mysticism initially conceptualized by Stace (1960). Items on this scale are both positively and negatively expressed to avoid problems of response set. A factor analysis of the M Scale indicated two major factors, a general mystical experience factor (20 items) and a religious interpretation factor (12 items). Preliminary evidence indicates that those high on the M Scale have more intrinsic religious motivation as defined by Hoge's (1972) scale, are more open to experience as defined by Taft's (1970) ego permissiveness scale, have more intense religious experience as defined by Hood's (1970) scale, and have moderately higher scores on the *L*, *Hs*, and *Hy* scales of the MMPI.

Mysticism remains an intriguing topic for consideration, not only because many have and continue to refer to it as providing a basic—if not *the* basic—experiential core or essence to human religious experience but also because it has been so neglected empirically. Reviews of the literature generally place mysticism under a brief section on intense religious experience and then go to indicate that little if any legitimate empirical research exists. For instance Dittes (1969: 646) briefly discusses mysticism in the context of psychedelics and quickly indicates that “one is hard pressed to find anything reliable to say on the subject.” Likewise, Clark (1971) while obviously strongly supporting the centrality of mysticism in religion is nevertheless unable to report much in the way of significant empirical research on the subject.

However, the picture is about to change. Not only is intense experience of all sorts becoming a legitimate topic of research concern for the social scientist (Hood, 1974b)

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but significant empirical research on mysticism is now apparently possible. The reason appears to be at least partially due to the excellent conceptual work of Stace (1960: 41-133). Stace in cold, dispassionate logic carefully demarcated the phenomenological characteristics of mystical experience and did so with such effectiveness that operational categories can easily be developed. This, of course, means that mysticism as a human experience can be studied much in the same way as any other human experience. Furthermore, investigators have shown that by utilizing operational categories developed rather directly from Stace's conceptualizations raters can be easily trained to reliably classify intense human experiences according to their degree of mystical quality (Clark & Raskin, 1967; Hood, 1973a; Pahnke, 1963; Pahnke & Richards, 1966).

Accordingly the present study reports research utilizing Stace's conceptualizations to construct a scale to measure reported mystical experience. Clark (1965) has argued that such a scale would be most helpful in studying the nature of the mystical consciousness and its consequences. I, of course, agree and am most hopeful that a scale would further legitimize and encourage the collection of empirical data in an area where empirical and experimental research has clearly been minimal.

SCALE CONSTRUCTION

Generating Scale Items

Stace's (1960) conceptual categories for mysticism were used as a framework for generating scale items. Stace's conceptualizations are based upon two fundamental assumptions. First, the mystical experience is itself a universal experience that is essentially identical in phenomenological terms despite wide variations in ideological interpretation of the experience. Second, the core categories of mysticism are not all definitionally essential to any particular individual mystical experiences since there are always borderline cases forming what are "family resemblances" based upon fulfillment of only some of these core categories.

The mysticism scale constructed from these categories and presented here is *Mysticism Scale, Research Form D (M scale)*. This form of the scale was developed from an initial pool of 108 items covering each of Stace's 8 categories. The final 32 items retained were those items which through several revisions proved to be most clearly understood while retaining face validity in terms of Stace's conceptualizations.¹ In addition these items had the greatest empirical validity as determined by discrimination indexes calculated on the basis of the ratio between mean response per item by the top quartile and the lower quartile of respondents to initial forms of this

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test. The final 32 item scale consists of the two best positively expressed and the two best negatively expressed items for each category determined by these procedures.²

Final Mysticism Scale (M scale)

Table 1 presents the final form of this scale.³ Items are listed under each of Stace's 8 categories with brief operational definitions indicated. The correlation of each category with the general dimension measured by the total scale is indicated in parentheses; it was based upon subscale to total scale correlations calculated with that subscale excluded from the total scale score. The contribution of each scale item to the total scale is indicated in parentheses after each item based upon item to total scale correlations calculated with that item excluded from the total scale score.

TABLE 1
MYSTICISM SCALE, RESEARCH FORM D
(Items listed under each criterion from which they were
operationalized and numbered according to actual scale position)

EGO QUALITY (E): 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. (.64)

3. I have had an experience in which something greater than myself seemed to absorb me (.52) I = .31; II = .54
4. I have had an experience in which everything seemed to disappear from my mind until I was conscious only of a void. (.36) I = .52; II = -.03
6. I have never had an experience in which I felt myself to be absorbed as one with all things. (.42) I = .54; II = .08
24. I have never had an experience in which my own self seemed to merge into something greater. (.45) I = .38; II = .36

UNIFYING QUALITY (U): Refers to the experience of the multiplicity of objects of perception as nevertheless united. Everything is in fact perceived as "One." (.60)

12. I have had an experience in which I realized the oneness of myself with all things. (.52) I = .64; II = .13
19. I have had an experience in which I felt everything in the world to be part of the same whole. (.52) I = .59; II = .19

(continued on next page)

2. One of Stace's criteria, paradoxicality, was not used. In none of our preliminary work did it effectively discriminate nor do we consider it an essential characteristic of the mystical experience. Stace himself seems to waver on this point (Stace, 1960: 270-276).

3. The instructions for this scale are as follows:

The attached booklet contains brief descriptions of a number of experiences. Some descriptions refer to phenomenon that you may have experienced while others refer to phenomenon that you may not have experienced. In each case note the description carefully and then place a mark in the left margin according to how much the description applies to your own experience. Write +1, +2, or -1, -2, or ? depending on how you feel in each case.

- +1: This description is probably true of my own experience or experiences
- 1: This description is probably not true of my own experience or experiences
- +2: This description is definitely true of my own experience or experiences
- 2: This description is definitely not true of my own experience or experiences
- ?: I cannot decide

Please mark each item trying to avoid if at all possible marking any item with a ?. In responding to each item, please understand that the items may be considered as applying to one experience or as applying to several different experiences. After completing the booklet, please be sure that all items have been marked—leave no items unanswered.

TABLE 1—(Continued)

MYSTICISM SCALE, RESEARCH FORM D
(Items listed under each criterion from which they were operationalized and numbered according to actual scale position)

28. I have never had an experience in which I became aware of a unity to all things. (.55) I = .60; II = .25
30. I have never had an experience in which all things seemed to be unified into a single whole. (.46) I = .59; II = .12
- INNER SUBJECTIVE QUALITY (Is):** Refers to the perception of an inner subjectivity to all things, even those usually experienced in purely material forms. (.56)
8. I have never had an experience in which I felt as if all things were alive. (.46) I = .45; II = .25
10. I have never had an experience in which all things seemed to be aware. (.43) I = .47; II = .18
29. I have had an experience in which all things seemed to be conscious. (.39) I = .54; II = .02
31. I have had an experience in which I felt nothing is ever really dead. (.37) I = .44; II = .11
- TEMPORAL/SPATIAL QUALITY (T):** 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." (.54)
1. I have had an experience which was both timeless and spaceless. (.48) I = .59; II = .11
11. I have had an experience in which I had no sense of time or space. (.41) I = .56; II = .02
15. I have never had an experience in which time and space were non-existent. (.46) I = .62; II = .02
27. I have never had an experience in which time, place, and distance were meaningless. (.54) I = .69; II = .08
- NOETIC QUALITY (N):** 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. (.50)
13. I have had an experience in which a new view of reality was revealed to me. (.43) I = .23; II = .50
16. I have never experienced anything that I could call ultimate reality. (.35) I = .09; II = .54
17. I have had an experience in which ultimate reality was revealed to me. (.44) I = .22; II = .53
26. I have never had an experience in which deeper aspects of reality were revealed to me. (.45) I = .17; II = .62
- INEFFABILITY (I):** 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. (.45)
2. I have never had an experience which was incapable of being expressed in words. (.29) I = .25; II = .21
21. I have never had an experience which I was unable to express adequately through language. (.37) I = .34; II = .24
23. I have had an experience that is impossible to communicate. (.42) I = .37; II = .27
32. I have had an experience that cannot be expressed in words. (.42) I = .40; II = .23
- POSITIVE AFFECT (P):** Refers to the positive affective quality of the experience. Typically the experience is of joy or blissful happiness. (.62)
5. I have experienced profound joy. (.36) I = .12; II = .50
7. I have never experienced a perfectly peaceful state. (.40) I = .26; II = .40
18. I have had an experience in which I felt that all was perfection at that time. (.45) I = .50; II = .15
25. I have never had an experience which left me with a feeling of wonder. (.40) I = .15; II = .54
- RELIGIOUS QUALITY (R):** 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. (.39)
9. I have never had an experience which seemed holy to me. (.44) I = .06; II = .72
14. I have never experienced anything to be divine. (.30) I = -.03; II = .59
20. I have had an experience which I knew to be sacred. (.33) I = -.04; II = .67
22. I have had an experience which left me with a feeling of awe. (.33) I = .01; II = .60

These values are based upon a sample of 300 college students, most of whom had at least nominal religious affiliation, mainly fundamental Protestantism. The average age of the males in this sample was 21.2 years (SD = 4.2), while the average age of the females was 20.1 (SD = 4.2). The mean on the M Scale for the males was 109.3 (SD = 22.6) and for the females it was 119.4 (SD = 18.8)⁴.

4. Scoring of the scale is by adding +3 to all positively expressed items. All negatively expressed items are first reversed as to algebraic sign and then a +3 is added. In all cases a "?" or a blank is assigned a value of 3. Hence, scores on the M Scale can range from 32 (least mystical) to 160 (most mystical).

An inspection of Table 1 indicates that the 32 items of the M Scale have adequate item-total coefficients, although items vary reasonably widely. However, in no instance are the coefficients unacceptably low. Similarly, each category has adequate part to total scale correlations.

Correlation Matrices

A correlation matrix was generated for the 32 scale items categorized according to the 8 conceptual categories of Stace from which they were operationalized. In addition, a correlation matrix was generated for the positive and negative expressions of each conceptual category. Results of these matrices indicate that almost all categories significantly intercorrelate as do the positive and negative expressions of these categories. Of special importance is the high significant correlations between positive and negative expressions of the same category. This would seem to indicate that the form of expression does not alter the meaningfulness of the measurement of these categories and hence the mixed nature of this scale is of significance in avoiding problems of response set when correlating this scale with other measures.⁵

Factor analysis

Table 1 also indicates the results of a factor analysis of the M Scale. The factor loadings for each item are given after the item. This was a principal components factor analysis utilizing a Varimax rotation procedure. Two factors were selected by utilizing Eigenvalues 12.00. This procedure was followed primarily because it resulted in two factors that appeared to have psychological and conceptual meaningfulness.⁶ However, application of the scree test (Gorsuch, 1974: 152-156) also indicated essentially two factors.

Inspection of Table 1 indicates that Factor I consisted of 20 items (nos. 1, 2, 4, 6, 8, 10, 11, 12, 15, 18, 19, 21, 23, 24, 27, 28, 29, 30, 31, 32). This factor included all items referring to the experience of unity, temporal and spatial variations, inner subjectivity, and ineffability as well as three ego loss items and one positive affect item. The mean score on Factor I when scored by summing across its defining items was 66.4 (SD = 15.6). Factor II consisted of the remaining 12 items (nos. 3, 5, 7, 9, 13, 14, 16, 17, 20, 22, 25, 26). This factor included all religious and noetic items as well as three positive affect items and one ego loss item. The mean score on Factor II was 48.6 (SD = 8.7). When scored in this manner, Factors I and II correlated significantly ($r = .47$, $p < .01$). The positive correlation between Factors I and II is readily interpretable in that even though the Varimax procedure produces factors that do not correlate theoretically, that characteristic only necessarily generalizes to full component scores. The presence of the correlation indicates that the M Scale can be considered to measure a factor common to Factors I and II. Of course this interpretation is also consistent with our methodological procedures in selecting scale items and in factor analysing the final scale which assured a focus upon the commonality underlying Stace's categories.

5. Copies of these matrices are available upon request to the author.

6. Factor I accounts for 22.9% of the variance while Factor II accounts for 8.9% of the variance.

Further research aimed at attempting to empirically isolate each of Stace's conceptual categories in relatively pure form is clearly desirable.

Factor I is perhaps best conceived as an indicator of intense experience, not interpreted religiously and not necessarily positive. In addition, the lack of any noetic items in this factor perhaps indicates that these experiences are not necessarily interpreted as objective sources of valid knowledge. Factor II is perhaps best conceived as an indicator of a joyful expression of more traditionally defined religious experiences which may or may not be mystical but which are interpreted to indicate a firm source of objective knowledge. It is consistent with Stace's notion of a specifically religious interpretation of mysticism that may not be utilized by persons who otherwise have such experiences. In addition, the correlation between these two factors supports Stace's notion that mystical experiences, including both his "introvertive" and "extravertive" forms, are best conceptualized as forming a single continuum with all criteria related via a pattern of "family resemblances" (Stace, 1960: 46-47). Specifically, it seems reasonable to conclude that the M Scale identifies the report of a single core experience of "mysticism" (Factor I) with a joyful, religious interpretation possible (Factor II). This, of course, means that some religious experiences may in fact not be mystical and some mystical experiences may in fact not be interpreted as religious. This interpretation is at least not inconsistent with the correlational and factorial data presented above and with Stace's own conceptualizations.

CORRELATIONS WITH OTHER SCALES

Four independent studies have been concluded that are relevant to the construct validity of the M Scale. Each of these studies reports the correlation of the Total M Scale and each of its component factors to another measure.⁷ Since the total M Scale has disproportionately more Factor I items than Factor II items, the correlations of the other scales with an equally weighted sum of Factor I plus Factor II are also given.

Intrinsic religious orientation

The relevance of the concepts of intrinsic and extrinsic religious orientation have recently been reviewed by Hunt and King (1971). Hoge (1972) has constructed an improved intrinsic religious motivation scale that can be utilized in a brief 10 item form. Our own previous research utilizing interview procedures (Hood, 1973c) has

7. Since the number of items in Factors I and II vary and since the total number of items in the M Scale is relatively small, the correlations of each factor with the total are spuriously inflated. This is especially the case for Factor I to total correlations since this factor consists of 20 items whose variance obviously contributes significantly to the variance of the total scale. The additional fact that Factors I and II positively correlate insure an extremely high positive correlation between Factor I and the M Scale which is in fact empirically obtained in all four studies. The same argument applies to the correlation between Factor II and the total M Scale but to a less extent due to the smaller number of items contained in this factor (Guilford & Fruchter, 1973: 320-321). An estimate can be made of the extent to which each factor can be expected to correlate with the total scale assuming that the factors did not correlate and the variances were the same as obtained. These estimates are .81, .94, .92, and .86 for Factor I to total correlations for the intrinsic, REEM, ego permissiveness, and MMPI studies respectively. For Factor II to total correlations these estimates are .58, .34, .40, and .49 respectively (Guilford & Fruchter, 1973: 386). These values can be compared to the actual obtained values as indicated in Tables 2 and 3.

demonstrated that when utilizing several of Stace's criteria for introvertive mysticism, intrinsic religiously oriented respondents are more likely to have significant experiences codifiable as mystical than are extrinsically oriented religious respondents. Accordingly, the M Scale should positively correlate with intrinsic religious orientation as measured by Hoge's scale. This prediction was tested in a sample of 65 students all enrolled at a private fundamental Protestant college in the South.

The mean score for these students on Hoge's 10 item intrinsic scale was 46.3 (SD = 4.1) while their mean score on the M Scale was 132.2 (SD = 23.4). The mean score on Factor I was 77.3 (SD = 17.0) while the mean score on Factor II was 55.0 (SD = 12.1). The correlation matrix for Hoge's scale, the total M Scale, Factors I and II, and the equally weighted composite of Factor I plus II is presented in Table 2.

TABLE 2
CORRELATION MATRIX FOR TOTAL M SCALE, FACTORS I AND II, AND INTRINSIC, REEM, AND EGO PERMISSIVENESS SCALES IN THREE INDEPENDENT SAMPLES

	Factors		Intrin- sic	Factors		REEM	Factors		Ego Permis- siveness			
	I	II		I	II		I	II				
Total M Scale	.86 ¹	.66 ¹	.99 ¹	.81**	.96 ¹	.57 ¹	.95 ¹	.47**	.95 ¹	.69 ¹	.97 ¹	-.75**
Factor I:												
General												
Mysticism		.18	.77 ¹	.68**	.30*	.81 ¹	.34*		.42**	.84 ¹		-.75**
Factor II:												
Religious												
interpretation (N=65)			.77 ¹	.58**	(N=52)	.81 ¹	.56**		(N=83)	.84 ¹		-.43**
Factors I+II				.82**			.56**					-.70**

*p < .05

**p < .01

¹Since these scales are experimentally interdependent, a significance test would not be interpretable.

Inspection of Table 2 indicates that the M Scale and both of its factors significantly correlate with Hoge's intrinsic scale as predicted. These data are consistent with other research indicating a greater report of mystical (Hood, 1973c) or other intense religious experiences (Hood, 1970, 1971, 1972, 1973a) among intrinsically oriented people. The relatively high M Scale and intrinsic scale means for this sample are perhaps due both to the actual intrinsic nature of the students and the normative pressure to respond with appropriate religious demeanor in terms of the demand characteristics of the situation. That is, the students were aware that a psychologist was assessing something about their religiosity at their own fiercely proud and fundamentally Christian school. However, the obtained correlations nevertheless are consistent with our predictions and are not unreasonable in terms of the core experiential conceptualizations of intrinsic religious motivation (Hood, 1970: 289; 1973c: 440).

Religious Experience Episodes Measure

Hood (1970) has developed a measure of reported religious experience, the Religious Experience Episodes Measure (REEM). This device consists of 15

descriptions of intense religious experiences culled from James' (1961) classic work. This measure has been shown to be related to a measure of hypnotic susceptibility (Hood, 1973b), to successfully distinguish between intrinsic and extrinsic religiously motivated people (Hood, 1970, 1971, 1972), and to be differentially sensitive to normative pressures to report religious experiences (Hood, 1972). Accordingly, it was predicted that the M Scale should significantly correlate with the REEM not only because of the fact that both the REEM and the M Scale significantly relate to intrinsic religious motivation but also because of the fact that the REEM measures the report of intense religious experiences, many of which have mystical characteristics according to the criteria utilized in constructing the M Scale.

The prediction was tested in a sample of 52 fundamental Protestants, all enrolled as undergraduates in a private fundamental religious college in the South. The mean score of these students on the REEM was 42.0 (SD = 12.1) while their mean score on the M Scale was 114.9 (SD = 25.5). The mean score on Factor I was 62.0 (SD = 22.1) while the mean score on Factor II was 53.0 (SD = 7.9). The correlation matrix for the REEM, the total M Scale, Factors I and II, and the equally weighted Factor I plus II is also presented in Table 2.

Inspection of Table 2 indicates that, as predicted, the M Scale and both of its factors significantly correlate with the REEM. These correlations are consistent with previous research demonstrating a relationship between the REEM and intrinsic religious orientation discussed above. Again, the relatively high M Scale and REEM means probably indicate both actual religious experiences and the normative pressure to report such experiences due to the sample and the conditions under which it was tested. The latter factor may account for the high means on both the REEM and Factor II. However, even on Factor I which is devoid of specifically religious language the scores were quite high indicating perhaps a significant proportion of the sample in fact had such experiences. The fact that two independently operationalized measures of mysticism positively correlate is encouraging and contributes to the construct validity of both measures.

Openness to experience

Taft (1969, 1970) has developed a scale to measure what he terms "ego permissiveness." Basically, this concept is related to the psychoanalytic notion of "regression in the service of the ego" (Kris, 1952) and is meant to refer to a process whereby the ego can utilize preconscious and unconscious potentialities. In less psychoanalytic language this concept is termed "openness to experience" (Schachtel, 1959) and is specifically indicated by belief in the supernatural, ecstatic emotions, and alterations of consciousness, among other factors (Taft, 1970). The present study utilized the five scales (peak experiences, dissociated experiences, openness to inner experiences, belief in the supernatural, and intrinsic arousal) of Taft's larger 8 scale Experience Questionnaire (Taft, 1970). These 5 scales cluster factorially and form the 50 item Ego Permissiveness Scale. Based upon the obvious overlap between many of Taft's conceptualizations of ego permissiveness and the conceptualizations of

mysticism derived from Stace, it was predicted that the M Scale would correlate negatively at a significant level with Taft's Ego Permissiveness Scale. Note that Taft's scale is scored so that a *lower* score indicates greater ego permissiveness.

This prediction was tested in a sample of 83 undergraduate psychology students enrolled at the University of Tennessee at Chattanooga, most of whom indicated at least nominal religious preference (mainly Baptist and Methodist). The mean score of these students on Taft's ego permissiveness scale was 151.1 (SD = 28.8) while their mean score on the M Scale was 110.2 (SD = 26.9). The mean score on Factor I was 63.1 (SD = 21.5) while the mean score on Factor II was 47.1 (SD = 9.4). The correlation matrix for Taft's Ego Permissiveness Scale, the M Scale, Factors I and II, and the equally weighted Factor I plus II is also presented in Table 2.

Inspection of Table 2 indicates that the M Scale and both of its factors significantly correlate with Taft's ego permissiveness scale. This is partially due to the overlapping of similar type items, especially the items on Taft's "peak experiences" criterion. However, it is also reasonably attributed to the fact that persons more open to experience of all types are likely to include persons who have a capacity for mystical experience. It also is suggestive to note that persons who are open to experience as measured by Taft's scale are also persons likely to willingly report intense, atypical experiences such as mystical experiences measured by the M Scale.

MMPI Scores

The MMPI is a widely used measure of personality although its use with religious students is problematic since several of the scale items contain religious content (Bohrstedt, Borgatta, & Evans, 1968). In addition, reverse scoring of relevant MMPI religious items have at least in one instance reversed what would otherwise appear to be a significant correlation indicating a relationship between reported religious experience and "weak ego strength" (Hood, 1974a). Nevertheless, the relationship of the M Scale to MMPI scores was investigated, largely because of an opportunity to include the M Scale in a battery of tests given as a class participation project in an undergraduate course in differential psychology.

The respondents were in a regularly scheduled course at the University of Tennessee at Chattanooga. The 29 students in this course completed both the MMPI and the M Scale. A majority indicated their religion as some form of Protestantism, mainly either Baptist or Methodist. The mean score of these students on the M Scale was 104.9 (SD = 24.1) with a mean score on Factor I of 60.5 (SD = 16.6) and on Factor II of 44.4 (SD = 9.5). The correlation matrix for the M Scale, Factors I and II and the equally weighted sum of Factor I plus II with MMPI scores is presented in Table 3.

Inspection of Table 3 indicates that the majority of correlations are insignificant. However, the three MMPI scales that do significantly correlate with the M Scale are somewhat intriguing. Hs and Hy significantly correlate with all the current scales except that Factor II falls short of significantly correlating with Hs. Both these scales are heavily loaded with items concerned with bodily functioning. The Hs Scale (Hypochondrias) is presumably a measure of abnormal concern with bodily functions while the Hy Scale (Hysteria) is presumably a measure of the probability of hysterical

TABLE 3
CORRELATION MATRIX FOR MMPI SCORES, M SCALE, FACTORS I AND II

	L	F	K	Hs	D	Hy	Pd	MF	Pa	Pt	Sc	Ma	Si	Total	Factors	
														M Scale	I	II
SD	1.8	4.0	5.1	6.3	7.3	4.0	4.5	7.8	3.5	10.2	8.9	4.9	11.1	1.00	.95 ¹	.84 ¹
Mean	3.6	5.0	14.1	5.7	21.2	21.0	18.6	35.2	10.7	15.2	14.3	19.8	28.8	1.00	.95 ¹	.84 ¹
Total M Scale	.31*	.12	.00	.38*	.16	.47**	.16	-.03	.01	-.04	.12	.19	.12	1.00	.95 ¹	.84 ¹
Factor																
I	.26	.18	-.97	.37*	.15	.38*	.15	-.12	-.05	.06	.09	.26	.07	.95 ¹	1.00	.63**
Factor																
II	.31*	.00	.13	.26	.07	.53**	.15	.12	-.08	.02	.14	.01	.19	.84 ¹	.63**	1.00
I+II	.32*	.10	.03	.35*	.12	.50*	.17	.00	-.07	-.02	.13	.15	.14	.99 ¹	.90 ¹	.90 ¹

Note: the sample was 29 University of Tennessee at Chattanooga students.

*p < .05, one-tailed

**p < .05, one-tailed

¹Since these scales are experimentally interdependent, a significance test would not be interpretable.

symptom formation (Hathaway & McKinley, 1951: 19). However, in non-pathological terminology the concern with bodily process and intense experiential states is precisely one aspect of the mystical consciousness and hence these correlations are reasonable.

Finally, the significant correlation of Factor II and the total M Scale with the L Scale (Lie score) is also not unreasonable. This scale is presumably a measure of the willingness to falsify scores by placing oneself in a favorable social light (Hathaway & McKinley, 1951: 18). This could be related to a social response set for religiously inclined respondents who may feel pressure due to religious commitment to present themselves as "religious" on our M Scale, especially Factor II, and to present themselves appropriately on the MMPI. Consistent with this interpretation is the fact that Factor II significantly correlates with the L Scale while Factor I does not. It is also worthy of note that the M Scale does not significantly correlate with those MMPI scales containing the greatest number of "religious" items (e.g. D, Mf, and F). But the correlation of Factor II with the L Scale may indicate that an assumption of the L Scale is invalid for religiously committed persons. Specifically, the L Scale represents behaviors presumably everyone has done but few desire to acknowledge. It may be that persons who score high on Factor II in fact have fewer such acts since they probably represent a conventionally socialized group among whom the behaviors of the L Scale are in fact less often found.

SUMMARY DISCUSSION

It would appear that the M Scale is a potentially useful instrument for persons interested in the investigation of mystical experiences, especially within a religious context. The scale has been deliberately developed from a conceptualization of mysticism that is presumably cross-cultural, ahistorical, and unbiased by religious ideology (Stace, 1960: 38-40). Now while this is, of course, too much to assume, Stace's conceptualizations appear to tend in that direction and have the proven value of empirical fruitfulness, at least as criteria for rating categories (Clark & Raskin, 1967; Hood, 1973a, c; Pahnke, 1963; Pahnke & Richards, 1966). Hopefully our operationalizations reflect at least the spirit of Stace's conceptualizations.

The M Scale in its present form has respectable internal consistency as evidenced by the correlations of items and factors with the total scale. Its two major factors are reasonably interpretable in terms of a general mysticism factor (I) and a religious interpretation factor (II) which, though not precisely formulated by Stace in this fashion, are not inconsistent with his own conceptualizations. It is also possible that Factor I represents a more inclusive phenomenon, a capacity for intense experience, of which mysticism is perhaps but one example. This possibility is worth exploring in future empirical studies.

The four correlational studies indicate at least the preliminary construct validity of the M Scale. This scale appears to reasonably correlate with a measure of openness to experience (Taft's Ego Permissiveness Scale), with an excellent measure of intrinsic religious orientation (Hoge's Intrinsic Religious Motivation Scale), and with an independently operationalized measure of intense religious experience (Hood's Religious Experience Episodes Measure). Its correlations with a few selected MMPI

scales, while perhaps less meaningful, nevertheless are congruent with a non-pathological assessment of mystical experience that includes a heightened concern with bodily states (Hy Scale) and presumably "abnormal" intense experiential states (Hs Scale). What tentatively emerges from these data is a reasonably consistent picture of a person who from a posture of openness to experience in fact experiences the world atypically and who, if he is devoutly oriented, identifies these experiences as sacred and joyful.

Whether this tentative formulation can be substantiated is a matter for further research. Hopefully, the M Scale can stimulate such research. Of particular importance would be research across a wide variety of populations, including both traditionally religious, non-traditionally religious, and "non-religious." Such research should allow Factors I and II of the M Scale to appear more distinctively and to differentially correlate with other measures.

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