

RELATIONSHIP OF SELF-REPORTED MYSTICISM WITH
DEPRESSION AND ANXIETY IN IRANIAN MUSLIMS^{1,2}

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Summary.—This study examined relationships of self-reported Mysticism with dispositional Depression and Anxiety in Iranian Muslims. The sample contained 80 women and 51 men undergraduates who volunteered to participate (M age = 20.5 yr., SD = 2.0). Participants responded to the Hood Mysticism Scale and to the Costello and Comrey Depression and Anxiety Scales. Scores on the Religious Interpretation dimension of mystical experience correlated negatively with those on Depression, explained a similar relationship observed for Extrovertive Mysticism, and moderated the otherwise positive relationship between Introvertive Mysticism and Anxiety. Moderation occurred when Introvertive Mysticism correlated negatively rather than positively with Anxiety in those who scored high on Religious Interpretation and very high on the Introvertive factor. These data suggested possibilities for reconciling conflicts that have appeared between philosophical interpretations of Introvertive Mysticism and previous self-report data.

Mysticism involves experiences of transcendent unity central to religious traditions worldwide. The ubiquity of such experiences makes them especially promising in efforts to develop a more international analysis of the psychology of religion. That potential was apparent in a recent study in which the Hood Mysticism Scale (Hood, 1975) was administered to Iranian Muslims and American Christians. This scale operationalizes the three dimensions which Stace (1960) identified as common to mysticism cross-culturally (Hood, Morris, & Watson, 1993). Extrovertive Mysticism refers to an awareness of the “ultimate oneness of all things” (Stace, p. 76) and is evident in the self-report, “I have had an experience in which I felt everything in the world to be part of the same whole.” Consciousness of an ultimate void is measured by Introvertive Mysticism and is illustrated in the claim, “I have had an experience in which I had no sense of time and space.” A final Religious Interpretation factor assesses mystical experiences as expressed in religious language, and is exemplified in the statement, “I have had an experi-

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ence which I knew to be sacred." In a confirmatory factor analysis of Hood Mysticism Scale scores, Iranian Muslims displayed the same three-factor structure as American Christians (Hood, Ghorbani, Watson, Ghramaleki, Bing, Davison, Morris, & Williamson, 2001).

In that investigation, correlations for samples in both Iran and the United States also linked Introvertive Mysticism with measures of more maladjusted functioning like Somatization and Obsessive-Compulsion. The Extrovertive and especially the Religious Interpretation factors were associated with lower rather than higher assessments of such forms of maladjustment only in Iran (Hood, *et al.*, 2001). A subsequent Iranian study further established that relationships of Introvertive Mysticism with maladjustment can become more obvious in multiple regressions in which all three mysticism factors are used simultaneously to predict other variables (Ghorbani & Watson, 2007). These data also indicated that Religious Interpretation can interact with the Extrovertive factor in defining at least some of the mental health advantages of mystical experience.

Findings for Introvertive Mysticism have perhaps been most surprising. According to Stace (1960), mystical adepts across religious traditions have described the Introvertive Mystical experience as joyful and beneficial; yet, questionnaire data have repeatedly linked this factor with maladjustment. The positive impact of Introvertive Mysticism may nevertheless require Religious Interpretation and thus become apparent only in interactions between these two factors. This possibility was examined in the present study. The Hood Mysticism Scale (Hood, 1975) was correlated with dispositional Depression and Anxiety (Costello & Comrey, 1967), two constructs not previously examined in Iranian studies of self-reported mysticism. The hypothesis was that the Religious Interpretation and Extrovertive factors would correlate negatively and the Introvertive factor would correlate positively with Depression and Anxiety. A further hypothesis was that negative Introvertive factor relationships with Depression and Anxiety would appear only in those who displayed high scores on the Religious Interpretation factor.

METHOD

Research participants were 80 women and 51 men who were undergraduates at the University of Tehran. All participation was fully voluntary. The mean age of this convenience sample was 20.5 yr. ($SD = 2.0$).

The Hood (1975) and Costello and Comrey (1967) scales were presented in a single questionnaire booklet of measures utilized in several different projects. A Likert scale, 0: Strongly disagree and 4: Strongly agree, was used with the 12-item Extrovertive Mysticism, 12-item Religious Interpretation, and 8-item Introvertive Mysticism factors from the Hood Mysticism Scale and with the 9-item Anxiety and the 14-item Depression Scales. Procedures for translating these scales from English into Persian along with evidence confirming the validity of these translations have been detailed in sev-

eral previous studies (e.g., Hood, *et al.*, 2001; Ghorbani & Watson, 2004, 2006).

Groups of varying size were tested in classrooms. Responding was completely anonymous and in conformity with institutional ethical guidelines. Scales were scored in terms of the average response per item. Correlations among measures were examined first and followed by multiple regression analyses. In predicting Depression and then Anxiety, the three Mysticism factors were entered simultaneously on the first step, followed by the Religious Interpretation-by-Introvertive and the Religious Interpretation-by-Extrovertive interactions on the second step.

RESULTS

Acceptable internal reliabilities were obtained for the Religious Interpretation ($\alpha = .76$, $M = 2.45$, $SD = 0.69$), Extrovertive Mysticism ($\alpha = .83$, $M = 2.23$, $SD = 0.73$), and Introvertive Mysticism ($\alpha = .66$, $M = 2.21$, $SD = 0.70$) factors, and for Depression ($\alpha = .89$, $M = 0.54$, $SD = 0.21$) and Anxiety ($\alpha = .80$, $M = 1.94$, $SD = 0.78$). Religious Interpretation correlated positively with the Extrovertive Mysticism (.58) and Introvertive Mysticism (.46) measures, with the latter two factors displaying a similar relationship (.56, $ps < .001$). A direct association also appeared between Depression and Anxiety (.46, $p < .001$).

In the analysis of Depression, negative correlations were obvious with the Religious Interpretation ($-.34$, $p < .001$) and Extrovertive Mysticism ($-.21$, $p < .05$) but not with the Introvertive Mysticism ($-.09$, $p < .10$) factors. A significant ΔR^2 value (.13, $p < .01$) on the first step of the multiple regression was produced solely by Religious Interpretation ($\beta = -.36$, $p < .01$). Interactions did not increase the variance explained on the second step.

None of the three Mysticism factors correlated with Anxiety. Relationship ranged from .04 to $-.12$ ($ps > .10$), and a significant effect also did not appear in the first step of the multiple regression ($\Delta R^2 = .030$, $p > .10$). Interactions, however, did produce an increase in the variance explained on the second step ($\Delta R^2 = .052$, $p < .05$). Data for this step indicated a direct association of Introvertive Mysticism with Anxiety ($\beta = 1.15$, $p < .01$) and a significant Religious Interpretation-by-Introvertive interaction ($\beta = -1.60$, $p < .01$).

This interaction was not fully clarified by simply re-examining Introvertive Mysticism correlations with Anxiety in groups scoring above or below the Religious Interpretation median of 2.33. A scatter plot suggested instead that the interaction reflected contrasts between participants displaying Introvertive Mysticism scores in the top third of the distribution in contrast to those in the bottom two-thirds. High and Low Religious Interpretation Groups, therefore, were divided into groups with the highest scores of Introvertive Mysticism involving the top 34% of the sample (Introvertive Mysticism score > 2.37) versus those who scored lower. With the High Religious Interpretation-Low Introvertive Mysticism group ($n = 25$), the correlation of

Anxiety with Introvertive Mysticism was .44 ($p < .05$). In the High Religious Interpretation-High Introvertive Mysticism group ($n = 35$), this relationship was significant in the opposite direction at $-.43$ ($p < .05$). Nonsignificant positive correlations appeared for the two Low Religious Interpretation subgroups.

DISCUSSION

As in previous investigations, Religious Interpretation was centrally important among the Hood Mysticism Scale (Hood, 1975) factors in defining the mental health implications of self-reported Mysticism. Religious Interpretation correlated negatively with Depression and, according to the multiple regression data, explained the previously observed negative Extrovertive Mysticism correlation with Depression. Most noteworthy, however, was the observation that Religious Interpretation moderated the Introvertive Mysticism relationship with Anxiety. In all but those who were above the median on Religious Interpretation and who exhibited very high scores of Introvertive Mysticism, Anxiety correlated or tended to correlate positively with the Introvertive Mysticism factor. The High Religious Interpretation-High Introvertive Mysticism Group instead displayed a significant linkage in the opposite direction.

This moderation effect perhaps suggested a way for reconciling the paradox that Introvertive experiences are described as psychologically beneficial in the philosophical literature, but maladaptive in self-report questionnaire studies. The in-depth and extensive philosophical analyses of Stace (1960) rested primarily upon famous accounts of mystical adepts from multiple religious traditions. Such historical figures presumably had stronger than usual mystical experiences, and in some instances cultivated higher introvertive mysticism through meditative practices. Such mystics, in other words, might reasonably be described as High Religious Interpretation-High Introvertive individuals. The implication, therefore, is that questionnaire data might become more like the philosophical observations of Stace if a subgroup of highly religious and highly introvertive research participants were specifically selected for analysis.

Finally, the present data assume a broader significance in that they reaffirm the potential of research into self-reported mysticism. The Hood Mysticism Scale has most frequently been examined with Judeo-Christian samples, but this measure once again was valid and yielded theoretically interesting results when administered to Iranian Muslims. This and previous studies, therefore, suggest that additional investigations into self-reported mystical experience could be useful in promoting a psychology of religion with a more international perspective.

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