



# Meditation, Health Promotion, And the Five Factor Model of Personality

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## Abstract

Although many studies have demonstrated the physical and psychological benefits of meditation, few studies have considered the personality factors involved in establishing and maintaining a meditation practice. The present study used the Five Factor model to compare frequency of meditation with personality characteristics. Overall, meditators were found to score higher than non-meditators on Factor II, Agreeableness and to exhibit higher levels of curiosity and open-mindedness. In addition, meditators were more attracted to social interaction and less stimulus-seeking. In contrast with some previous research, the present study found no relationship between meditation and Factor IV, Emotional Stability.

## Introduction

Although meditation as a spiritual practice has existed for at least three millennia, psychological research on meditation is barely fifty years old (Walsh & Shapiro, 2006). For the most part, results from these studies have shown an impressive list of outcomes that link meditation with both physical and psychological health. For example, meditation

- helps alleviate symptoms associated with asthma, stuttering, and type 2 diabetes (Murphy & Donovan, 1997)
- appears to be useful in the treatment of psoriasis, prostate cancer, and chronic pain (Kabat-Zinn, 2003; Carlson, Speca, Patel, & Goodey, 2003).
- helps control substance abuse (Gelderloos, Walton, Orme-Johnson, & Alexander, 1991), panic disorder (Miller, Fletcher, & Kabat-Zinn, 1995), and symptoms of distress in cancer patients (Specia, Carlson, Goodey, & Angen, 2000).

Despite this burgeoning linkage between meditation and physical and psychological health, not many studies have considered the personality factors that affect an individual's motivation to start and maintain a meditation practice. To a large degree, meditation's potential as a physical and mental health promotion strategy depends on the willingness of individuals to participate in the practice.

One limitation of most earlier studies linking personality and meditative practice is that they were conducted before the emergence of personality psychology's dominant paradigm, the Big Five or Five Factor Model (BF/FFM; John & Srivastava, 1999). Consequently, they often focused on neuroticism rather than psychological adjustment and also do not assess the full range of normal personality. The present study looked at associations between the five major personality factors and how frequently people meditate. Our predictions are based on previous research on the Five Factors.

## Meditation and the Five Factors

### Factor I, *Extraversion* :

No consistent pattern with frequency of meditation (Delmonte, 1988; West, 1980; Travis, Alexander, DuBois, 2004), so no prediction regarding frequency of meditation and Extraversion.

### Factor II, *Agreeableness*:

Agreeableness has been linked with the qualities of receptivity and pliancy (Johnson & Ostrandorf, 1993). Prediction: Frequency of meditation would be related to Factor II.

### Factor III, *Conscientiousness*:

Findings from studies of meditation and Conscientiousness appear to be contradictory (Travis et al., 2004; Farge, Hartung, & Borland, 1979), so we predicted no relationship between Factor III and frequency of meditation.

### Factor IV, *Neuroticism*:

Although more neurotic individuals seem to be attracted to meditation initially (Williams, Francis, & Durham, 1976), they are also more likely to discontinue the practice (Delmonte, 1980, 1988; Smith, 1978; West, 1980). In contrast, meditators who persist in the practice demonstrate lower levels of *Neuroticism*. Prediction: Emotional Stability should predict frequency of meditation.

### Factor V, *Openness to Experience*:

Some previous research has shown that Factor V relates to the willingness to use complementary and alternative medicine (Honda & Jacobson, 2005) to address issues of physical and mental health. Prediction: a positive correlation between Factor V and meditation frequency.

## Method

### Participants

N = 165 adult evening college students, working adults, members of meditation groups, and citizens called for jury duty. Of those who identified their sex, 63 were male and 91 were female. Mean age of participants was 40.23 years.

### Measures

A demographic questionnaire and the Hogan Personality Inventory (HPI; Hogan & Hogan, 1995). Meditation was defined as "the practice of emptying the mind of thoughts or concentrating the mind on one thing in order to aid mental or spiritual development." Participants chose one of the following responses:

- I meditate regularly (i.e., several times a month).
- I meditate occasionally (i.e., several times a year).
- I don't meditate now but I might in the future.
- I don't meditate now and it is unlikely I will in the future.

## Analyses

The only statistically significant result from analysis of demographic variables and meditation frequency was a small correlation ( $r = .18$ ,  $p < .05$ ) between age and frequency of meditation. Consequently, age was used as a covariate in subsequent analyses of variance.

A scree test of eigenvalues after a principal components analysis of HIC scores suggested a five factor solution, accounting for 46.8% of the variance. Five factor scores from the varimax rotated solution were computed to be used in subsequent analyses. Meditation frequency scores were correlated with both the HIC and five factor scores. A series of analyses of covariance, with the five factor scores as dependent variables, the four levels of meditation frequency as a fixed factor, and age as covariate, were conducted to identify patterns of personality differences for differing frequencies of meditation.

A stepwise discriminant analysis also used the HPI subscales to predict membership in two groups: persons who described themselves as frequent meditators, and persons who said they were unlikely ever to meditate. Of the 115 suitable cases for this analysis, 9 were dropped because of missing data. Subsequently, the analysis which included 39 meditators and 67 non-meditators was conducted while controlling for the difference in group size.

## Results

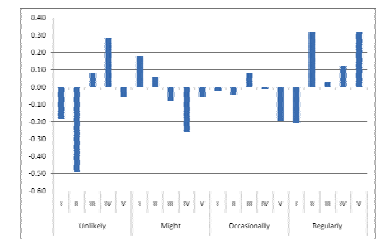
Results from the analysis showed meditation correlating with the five factor scores as follows:

Factor I,  $r = -.05$ ; Factor II,  $r = .26$ ,  $p < .01$ ; Factor III,  $r = -.03$ ; Factor IV,  $r = -.02$ , and Factor V,  $r = .12$ . When each of the five factor scores was entered as a dependent variable in an ANCOVA with the four-level meditation frequency variable as a predictor and age as a covariate, the only significant result was for Factor II,  $F_{(3,137)} = 4.26$ ,  $p < .01$ . Figure 1 shows mean personality factor profiles for the four levels of meditation: Unlikely ever to meditate, Might meditate in the future, Meditate occasionally, Meditate regularly.

The discriminant function analysis based on the homogeneous item clusters separated the two groups on three dimensions. Participants who meditate regularly scored higher on Likes Parties (Mean<sub>med</sub> = 2.13, Mean<sub>non-med</sub> = 2.01) and on Reading (Mean<sub>med</sub> = 2.54, Mean<sub>non-med</sub> = 1.81). Regular meditators scored lower on Likes Crowds, however, than non-meditators (Mean<sub>med</sub> = 1.61, Mean<sub>non-med</sub> = 2.09). The classification results indicated that 70.8% of the original grouped cases were correctly classified with 53.8% of the meditators correctly classified and 80.6% of the non-meditators correctly classified.

High scorers on Reading tend to be more curious and open-minded. The HICs Likes Parties and Likes Crowds are subscales of the HPI scale Sociability, which relates to Factor I, Extraversion. High scorers on the Likes Parties HIC tend to enjoy social interaction. Individuals who score high on Likes Crowds seek stimulation and variety, tend to have short attention spans, and may be inclined to hyperactivity (Hogan & Hogan, 1995).

Figure 1



## Discussion

The purpose of the present study was to extend our knowledge of health-seeking behavior and personality by looking at the relationship between the Five Factor model of personality and persons who maintain a meditation practice. At the level of the Five Factors, correlation and analysis of variance confirmed only the relationship between Factor II (Agreeableness) and frequency of meditation.

At the level of the HICs, meditators were found to be more curious and open-minded than non-meditators, more attracted to social interaction, and less stimulus seeking than non-meditators.

Likes Parties and Likes Crowds are both part of the HPI Sociability (i.e., Extraversion) factor. In the present study, many of the participants who were meditators belonged to meditation groups that met regularly. Perhaps research that compared meditation group members with meditators who do not belong to such groups would provide clearer understanding of the relationship between Extraversion and meditation practice. Meditators in the present study were found to be more intellectually curious and open-minded than non-meditators and, perhaps not surprisingly given the behaviors associated with meditation, they had longer attention spans.

In summary, the present study found that individuals more likely to maintain a meditation practice and, indirectly, more likely to experience its salutary benefits, demonstrate higher levels of agreeableness, pliancy, and receptivity, they show higher levels of open-mindedness and, in contrast with previous research, they were no more emotionally stable than non-meditators.