

## PAPER 142

### PSYCHOLOGICAL EFFECTS OF TRANSCENDENTAL MEDITATION<sup>1</sup>

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Marked decreases in both the number of life situations felt to be a problem and the number of serious problems experienced, as well as improvements in self-image and decreases in hostility, were found in subjects practising Transcendental Meditation over a six-week period.—EDITORS

Research on Transcendental Meditation has to date focussed primarily on physiological changes occurring during the practice. The purpose of this study was to quantify some of the psychological changes which take place in individuals practicing Transcendental Meditation.

**SUBJECTS**—Fifteen subjects (nine males and six females) with a mean age of 23 years (range 18–36 years) initially participated in the study. Of these, thirteen completed both assessments. The final sample was composed of two medical students, one nurse, one nursing student, four high-school teachers, one graduate student, one research assistant, one lab technician, one college freshman, and one high-school graduate.

**INSTRUMENTS**—1. *The Thematic Aperception Test (TAT)*. Responses are generally thought to reflect

attitudes beneath the surface conscious level, or socially unacceptable attitudes that one would not obtain from a self-report or interview format. The subjects' recorded responses were scored by clause analysis (using standard scales) in three categories considered most likely to be affected by Transcendental Meditation: Anxiety, Hostility, and Human Relations. Clauses containing pertinent emotional content were given numerical weight, using the standard scoring procedures. Each scale was scored for all subjects on test and retest by only one scorer to minimize scoring variability. The scorer, however, did not know the identity of the individual whose test he was evaluating.

2. *The Mooney Problem Check List*. This test has been used in health professions and in education to give a problem profile and consists of a list of over 300 potential problems grouped for scoring into categories such as social relations, morals and religion, finance, and family. There are several ver-

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sions of the Mooney Problem Check List, each designed for a different age group. In this study, because of the age range of the sample, both Adult and College versions were administered.

3. A *Semantic Differential Questionnaire* was constructed with the aim of evaluating three potential areas of change: (a) relation to self; (b) self in relation to other people, and (c) self in relation to things other than people or self specifically. Fifteen statements were selected for each of these categories. Each statement was accompanied by a seven-point scale indicating varying degrees of agreement and disagreement with the statement. Through discussion between the researchers and consultation with a teacher of Transcendental Meditation, optimum positions for each question were chosen and the remaining positions given a numerical value in relation to the optimum.

**PROCEDURE**—All subjects were given preliminary psychological testing during the week before they learned Transcendental Meditation. These test results were then used as a baseline for evaluating results of retesting six weeks later. Thus, each subject acted as his own control.

**RESULTS**—Subjects showed improvements in all psychological variables measured over the first six weeks of practicing Transcendental Meditation.

Results on the student version of the Mooney Problem Check List showed a significant decrease in both the total number of life situations felt to be a problem to the subject ( $p < .05$ ), and also in the

number of serious problems subjects reported experiencing ( $p < .01$ ). Furthermore, a significant improvement in self-image ( $p < .05$ ) on the Semantic Differential Questionnaire, and a significant decrease in hostility ( $p < .05$ ) on the TAT were found. A clear trend toward significance was seen in the reduction of anxiety measured on the TAT ( $p = .133$ ).

Statements in the Semantic Differential Questionnaire to which the greatest number of subjects responded were, "I feel as though I have a great deal of energy," "I feel healthy," "My mind feels fresh and creative," "I am enjoying life," and "I find it easy to get along with people."

Results on the Adult version of the Mooney Problem Check List and the TAT-Human Relations Scale did not reach significance. The subgroup data of these tests do, however, suggest interesting trends and tend to reinforce the significant changes seen in the other tests.

**CONCLUSION** — Meditators often report that the practice of Transcendental Meditation improves their social relations, and gives them a feeling of inner peace, personal fulfillment, and an increased ability to understand and deal with life experiences both of internal and external origin, and consequently leads to reduced anxiety, hostility, and tension. The results of our psychological testing indicate support for these claims. The observed improvements in mental health are noteworthy, particularly in view of the short period of time over which this study was conducted.