PRINCIPLED MORAL THINKING WAS FOUND TO BE ENHANCED BY TRANSCENDENTAL MEDITATION, AND STILL FURTHER ENHANCED BY THE TM-SIDHI PROGRAMME. —EDITORS

The purpose of this study was to investigate whether the practice of the Transcendental Meditation (TM) and TM-Sidhi program influences cognitive-moral development. Seventy-six undergraduate students, ranging in age from 16 to 23 years, participated in the study: 17 students from Roger Williams College, Rhode Island, who were not predisposed to starting the TM program (nonmeditators); 12 students from the same college who were tested immediately before starting the TM program (pre-meditators); 20 students from Maharishi International University, Iowa, who were regularly practicing the TM program (TM group); and 27 students from the latter school who were regularly practicing the TM and TM-Sidhi program (TM-Sidhi group). All students were tested in a group situation using Rest's Defining Issues Test, which measures the percentage of principled moral thinking. Results indicate that no difference existed between the nonmeditator and pre-meditator groups, although significant differences were found between the TM program group and nonmeditator and pre-meditator groups. Most importantly, a significant difference was found between the TM-Sidhi group and the TM group. These findings indicate that the practice of the TM program positively influences the development of principled moral thinking and that the practice of the TM-Sidhi program enhances development of principled moral thinking still further. Discussion of the results, based upon the experience of the unified field of natural law, is included.

INTRODUCTION

Cognitive-developmental theorists (Piaget, 1932; Kohlberg, 1969) have proposed that individuals develop qualitatively in cognitive abilities in an invariant, sequential, universal, stage-like manner. Kohlberg (1969) has delineated six stages within three major levels of moral development: preconventional, conventional, and postconventional (principled thinking).

In addition to the necessary but not sufficient condition of Piagetian cognitive stage development, Kohlberg (1969) and Kohlberg and Turiel (1971) have argued that diverse social role-taking opportunities are responsible for stage progression in moral development. Studies assessing moral development have typically incorporated into their designs interventions, such as moral dilemma discussions and modeling of levels of moral reasoning, which have taken the factor of role-taking into account (Lawrence, 1981). Other studies, employing more general psychological growth interventions, have incorporated into their designs techniques, such as empathy training and discussions, aimed at social perspective-taking to enhance moral judgment development (Hurt, 1975; Erikson et al., 1976).

According to the Vedic Psychology of Maharishi Mahesh Yogi (1969), the experience of “pure consciousness,” located at the basis of physical existence in the state of least excitation of human consciousness, is the key factor in promoting human development. It is suggested by Alexander (1982) that this experience of higher states of consciousness, which contains the properties of unbounded, non-localized awareness (Domash, 1977), directly promotes the cognitive development of the individual. Studies conducted on the Transcendental Meditation (TM) technique, which is defined as
"turning the attention inwards towards the subtler levels of a thought until the mind transcends and arrives at the source of thought" (Maharishi Mahesh Yogi, 1969, p. 470), the field of pure consciousness, have shown that the practice of this technology of consciousness enhances cognitive and social functioning (see Orme-Johnson and Farrow, 1977). This experience of pure consciousness has been found to be accompanied by physiological parameters distinct from those which define the waking, dreaming, and deep sleep states of consciousness (Wallace, 1970).

In addition to the TM technique, which provides for the natural and spontaneous experience of the state of least excitation of consciousness, Maharishi has brought out the TM-Sidhi program, based upon the formulas of Patanjali's Yoga Sutras, which develops the ability of the individual to entertain intentions while established in the state of least excitation of consciousness. The practice of the TM-Sidhi program has the effect of stabilizing pure consciousness in the life of the individual and is predicted to bring about more rapid acquisition of higher human abilities (Maharishi Mahesh Yogi, 1978).

The purpose of this study was to investigate whether the practice of the TM and TM-Sidhi programs influences cognitive-moral development. It was hypothesized that individuals practicing the TM program would show a higher percentage of principled thinking, using Rest's (1974) Defining Issues Test, than subjects not practicing the TM program. It was also hypothesized that subjects practicing the TM and TM-Sidhi program would show an even higher percentage of principled thinking than subjects only practicing the TM program. Lastly, it was hypothesized that there would be no difference between subjects not predisposed to starting the practice of the TM program and those predisposed to beginning the practice.

METHOD

SUBJECTS—Seventy-six undergraduate students, ranging in age from 16 to 23 years, participated in the study: 17 students from Roger Williams College (RWC) in Rhode Island who were not predisposed to starting the TM program (nonmeditators); 12 students from RWC who were tested immediately before starting the TM program (pre-meditators); 20 students from Maharishi International University (MIU) in Iowa who were regularly practicing the TM program (TM group); and 27 students from MIU who were regularly practicing the TM and TM-Sidhi program (TM-Sidhi group). The mean age of the nonmeditators was 19.65, compared to 19.83 for the pre-meditators, 19.55 for the TM group and 20.84 for the TM-Sidhi group. There were 10 males and 7 females in the nonmeditator group, 6 males and 6 females in the pre-meditator group, 13 males and 7 females in the TM group, and 16 males and 11 females in the TM-Sidhi group. Both RWC and MIU are small, open admissions, liberal arts colleges.

PROCEDURE—All students were tested in a group situation using Rest's Defining Issues Test (DIT). The DIT yields a "P" percentage score that describes the amount of principled moral thinking exhibited by a subject. Rest (1974) reports that the DIT correlates with the open-ended interview form used by Kohlberg at the .68 level and has a test-retest reliability of .81.

The type one error for all analyses was set at the .05 level, one-tailed.

RESULTS

The results of the study support all three above hypotheses. A one-way ANOVA yielded an F of 11.73 (p < .001), indicating a significant difference among the groups (see table 1).

Since the differences among the groups had been specified prior to the study, a t-test for Differences Among Several Means was used for the post-hoc analyses. It was found that no significant difference existed between the nonmeditator (P% mean = 33.82) and pre-meditator (P% mean = 35.67) groups, although significant differences were found between the TM group (P% mean = 46.85) and the nonmeditator and pre-meditator groups. Most importantly, a significant difference was found between the TM-Sidhi group (P% mean = 56.11) and the TM group (see fig. 1).

Further analysis indicated that the factor of age contributed to the prediction of moral thinking when considering the TM program and TM-Sidhi program groups (r = .316, p < .025). The correlation between membership in the TM program and TM-Sidhi program groups and principled moral thinking was found to be .383 (p < .005). A partial correlation, controlling for age, indicated that the practice of the
TM-Sidhi program contributed to principled moral thinking, independent of the factor of age \( (r = .273, p < .05) \). When controlling for group membership in the TM program and the TM-Sidhi program, the factor of age was still found to be not significant \( (r = .154, \text{NS}) \).

**TABLE 1**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
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<tr>
<td>Total</td>
<td>18,596.88</td>
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<td>Between Groups</td>
<td>6,554.53</td>
<td>3</td>
<td>2,184.84</td>
<td>13.06</td>
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<tr>
<td>Within Groups</td>
<td>12,042.35</td>
<td>72</td>
<td>167.25</td>
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</tbody>
</table>

**FIG. 1.** PERCENTAGE OF PRINCIPLED MORAL THINKING EXHIBITED BY NON-MEDITATOR, PRE-MEDITATOR, TM PROGRAM, AND TM-SIDHI PROGRAM GROUPS.

**DISCUSSION**

The results indicate that the practice of the TM program positively influences the development of principled moral thinking and that the practice of the TM and TM-Sidhi program enhances the development of principled moral thinking still further. The practice of the TM program provides the individual with the direct experience of pure consciousness, the state of least excitation of consciousness. According to Maharishi's Vedic Psychology pure consciousness is the unified field of natural law, which gives rise to the evolution of man and nature. Experience of this unified field of natural law is the experience of the most abstract, universal field of natural law. This study indicates that this experience enhances cognitive-moral thinking.

Subjective reports by individuals indicate that the experience of pure consciousness is more pronounced as a result of practicing the TM and TM-Sidhi program. The experience of pure consciousness as a unified field of natural law also becomes more apparent (see e.g. Orme-Johnson et al., 1981).

What the practice of the TM and TM-Sidhi program provides is a systematic technology of consciousness for enhancing the development of the student. Unlike other educational procedures which emphasize group interaction and conflict situations, the TM and TM-Sidhi program is a technology which directly influences the internal environment of the student.

Rival explanations of the results may suggest that individuals who practiced the TM-Sidhi program had higher Scholastic Aptitude Test (SAT) scores or a higher Grade Point Average (GPA) than individuals only practicing the TM program. These factors have been known to influence principled moral thinking (Rest, 1974). Correlations between TM program and TM-Sidhi program group membership \( (N = 15) \) and SAT scores \( (r = .032, \text{NS}) \) and between group membership \( (N = 26) \) and GPA \( (r = -.133, \text{NS}) \) indicate that SAT scores and GPA were not significant predictors in determining TM program and TM-Sidhi program group membership.

Based upon the above results, educational systems are encouraged to make use of the TM and TM-Sidhi program to enhance the cognitive-moral thinking of their students. Grant (1981) in his observation of public schools found that more and more behavior is becoming tolerable unless specifically declared illegal by law. What is necessary is to develop the student's ability to perform action in accord with natural law. This means that thought and action will be evolutionary not only for the individual but also for the whole of society. Research on the TM and TM-Sidhi program indicates that the practice of this technology of consciousness increases thinking and behavior which promote the growth of the individual and society (see Orme-Johnson and Farrow, 1977).
REFERENCES

ALEXANDER, C. 1982. Ego development, personality, and behavioral change in inmates practicing the Transcendental Meditation technique or participating in other programs: A cross-sectional and longitudinal study. Unpublished manuscript, Harvard University.


