THE EFFECT OF THE TRANSCENDENTAL MEDITATION PROGRAM UPON UNIVERSITY ACADEMIC ATTAINMENT

ROY W. COLLIER, PH.D.

Department of English as a Second Language, College of Arts and Sciences,
University of Hawaii, Honolulu, Hawaii


Students participating in the Transcendental Meditation program showed marked improvement in academic performance. — EDITORS

A retrospective study was conducted to ascertain the influence of the Transcendental Meditation program on university academic attainment. The seven subjects had maintained an uninterrupted attendance of two or more semesters at the University of Hawaii before they began to practice the Transcendental Meditation technique. Their grade records were compared with performance for one or more semesters after the practice was begun. The nonsignificant changes in grades before Transcendental Meditation indicate that the subjects were typical of the University of Hawaii student population. The highly significant improvement in grades in the first month after learning Transcendental Meditation \((p < .001)\) indicates that this technique is of great value in improving the performance and achievement of students.

INTRODUCTION

Educators have recently become interested in experiments on Transcendental Meditation (TM), a technique that enlivens the dormant potential of the student and thereby improves his learning capability. This is a fresh area of inquiry for teachers who have traditionally focused their efforts on modification of the student's external environment and the teacher's materials and methods.

Numerous researchers have produced an impressive list of the physiological, psychological, and sociological changes that take place as a result of practicing Transcendental Meditation, a simple mental technique involving direct experience rather than philosophical thought or religious belief. The technique brings about an overall enlivening and balancing of the mind and the body, which spontaneously lead to increased efficiency in educational pursuits. This study investigates the effects of the Transcendental Meditation program on academic attainment.

METHODS

The academic records of seven students practicing Transcendental Meditation at the University of Hawaii were examined retrospectively to determine the effect of meditation on their academic performance. These subjects were selected on the basis of their uninterrupted attendance at the university for at least two semesters before and one semester after beginning the practice. Academic attainment was measured by grade point average (GPA). Four points were assigned for a grade of A in a course, three points for a B, two for a C, one for a D, and zero for a failing grade. Grades for a student's first semester were not included, as they are not typical of later semesters for most students at this university.* Subjects' GPA's for two or more semesters before they began Transcendental Meditation were compared with their GPA's for one or more semesters after they began the practice.

RESULTS

The cumulative change in grade point average for the meditating students appears in fig. 1. The means, standard deviations, and probabilities of mean differences in grade point average from one semester to the next appear in table 1. The differences between GPA's during the two semesters preceding instruction in the Transcendental Meditation technique (.071 and -.028) were not significant. Previous studies at the University of Hawaii indicate that, with the omission of the first semester, most students' grade point averages remain essentially constant throughout their undergraduate careers.* The insignificant changes in the subjects' GPA's during the two semesters preceding instruction in Transcendental Meditation are therefore consistent with the changes in the GPA's of the university's student population as a whole.

* Alfred Levy, Dean of Students, University of Hawaii, 1973: personal communication.
TABLE 1

CHANGES IN GRADE POINT AVERAGES FOR STUDENTS PRACTICING TRANSCENDENTAL MEDITATION

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>N</th>
<th>MEAN GPA</th>
<th>MEAN DIFFERENCES AMONG SEMESTERS</th>
<th>S.D. OF DIFFERENCES</th>
<th>t*</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two semesters before TM</td>
<td>7</td>
<td>2.73</td>
<td>0.071</td>
<td>0.126</td>
<td>1.38</td>
<td>NS (0.11)</td>
</tr>
<tr>
<td>One semester before TM</td>
<td>7</td>
<td>2.80</td>
<td>-0.028</td>
<td>0.146</td>
<td>0.470</td>
<td>NS (0.33)</td>
</tr>
<tr>
<td>Semester TM begun</td>
<td>7</td>
<td>2.77</td>
<td>0.171</td>
<td>0.069</td>
<td>6.06</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>One semester after TM</td>
<td>7</td>
<td>2.95</td>
<td>0.000</td>
<td>0.063</td>
<td>0.000</td>
<td>NS (0.50)</td>
</tr>
<tr>
<td>Two semesters after TM</td>
<td>5</td>
<td>(3.04)</td>
<td>0.110</td>
<td>0.089</td>
<td>1.74</td>
<td>NS (0.11)</td>
</tr>
<tr>
<td>Three semesters after TM</td>
<td>3</td>
<td>(2.93)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: The mean values for the second and third semesters following instruction in Transcendental Meditation cannot be compared directly with preceding semesters because some subjects are not included.

*One-tailed t-test for correlated samples.

NS = not significant.

The highly significant increase of 0.17 in grade point average (p < .001) in the first semester following instruction in TM is a remarkable departure from this pattern of nonchange (table 1). The further improvement of 0.11 in grade point average during the third semester following instruction in TM, while insignificant (N = 3, p = .11), suggests that improvements due to TM are maintained and enhanced over time. Indeed, only one of the 17 individual differences between semesters following instruction in TM was negative (χ² = 9.30, p < .01). For each subject the mean of the GPA's for the semester during which TM was begun and the two preceding semesters was calculated. Also calculated for each subject was the mean of the GPA's for all semesters completed after that in which TM was begun. These means for each subject are presented in table 2. The difference between the group mean GPA before TM and after TM was highly significant (p = .0057).

DISCUSSION

The considerable body of research on the Transcendental Meditation program indicates that superior performance associated with the practice of the Transcendental
Meditation technique is, in part, a function of some of the following qualities developed as a result of the practice: integrated behavior (2, 4); more productive activity (3); increased flexibility in adapting to a novel situation (6); increased perceptual ability (7); faster reactions (9); increased energy and efficiency (8); reduced tension (lower anxiety) (5); and decreased inhibition (1). The significant improvement in grade point average found in this small study supports the idea that superior academic performance and achievement are spontaneous consequences of the improvement in physiology and psychology brought about by the practice of Transcendental Meditation.

It now seems clear that significant improvements can be made in the educational process without changing the classroom environment, teaching materials, or teaching techniques, but rather by enlivening the internal environment of the student. For example, most educators agree that anxiety is a major impediment to learning; the well-studied reduction in anxiety that occurs in people who practice the Transcendental Meditation technique (2, 4, 5) undoubtedly contributes to the increased motivation and academic performance indicated by this study. These preliminary results indicate that the full potential of this technique for developing the student’s capacity to learn should be thoroughly explored in future research.

REFERENCES

1. Fehr, T.; Nerstheimer, U.; and Torber, S. 1972. Study of personality changes resulting from the Transcendental Meditation program: Freiburger Personality Inventory. (Published in this volume.)
5. Lazar, Z.; Farwell, L.; and Farrow, J. T. 1972. The effects of the Transcendental Meditation program on anxiety, drug abuse, cigarette smoking, and alcohol consumption. (Published in this volume.)
7. Pelletier, K. R. 1974. The effects of the Transcendental Meditation program on perceptual style: Increased field independence. (Published in this volume.)
9. Shaw, R., and Kolb, D. 1971. Reaction time following the Transcendental Meditation technique. (Published in this volume.)