

**THE EFFECTS OF TRANSCENDENTAL MEDITATION ON SOME CHARACTERISTICS OF JUVENILE
OFFENDERS' PERSONALITY**

BY

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ชื่อเรื่อง	ผลของการฝึกสมาธิแบบที่ เอ็มต่อลักษณะบุคลิกภาพบางประการของเยาวชน สถานพินิจและคุ้มครองเด็กกลาง
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บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อ เปรียบเทียบผลของการฝึกสมาธิแบบที่ เอ็มที่มีต่อลักษณะบุคลิกภาพบางประการของเยาวชนสถานพินิจคุ้มครองเด็กกลาง ตัวอย่างประชากรที่ใช้เป็น เยาวชนสถานพินิจและคุ้มครองเด็กกลาง อายุ ๑๔ ปี ถึง ๑๕ ปี จำนวน ๕๕ คน โดยแบ่งเป็น ๒ กลุ่ม คือกลุ่มที่ฝึกสมาธิ ๓๔ คน กลุ่มควบคุม ๒๐ คน เยาวชน ๗ ทุกคนได้รับการทดสอบเอ็ม เอ็ม พี ไอ ฉบับภาษาไทย เรียบเรียงและแปลโดย เกษมศักดิ์ ภูมิศรีแก้ว ก่อนเริ่มเรียนการฝึกสมาธิแบบที่ เอ็ม มีการจดบันทึกจำนวนครั้งของการฝึกสมาธิในกลุ่มที่ได้รับการฝึก หลังจากระยะเวลา ๓ เดือน กลุ่มที่ฝึกสมาธิแบบที่ เอ็มเกิน ๖๕ เปอร์เซ็นต์มี ๑๔ คน จาก ๓๔ คน ส่วนกลุ่มควบคุมมีจำนวน ๒๐ คนเท่าเดิม โดยให้มานั่งรวมกลุ่มด้วยทุกวันเช้าเย็น ใช้สถิติวิเคราะห์หาความแตกต่างของตัวกลางระหว่างกลุ่มและภายในกลุ่ม พบว่า ในการวิเคราะห์เปรียบเทียบค่าตัวกลางระหว่างกลุ่มฝึกสมาธิกับกลุ่มควบคุม กลุ่มฝึกฯ มีคะแนนลดลง ๒ มาตรฐาน อย่างมีนัยสำคัญ คือ มาตรฐานความสนใจในเรื่องเพศและความหวาดระแวง ส่วนในการเปรียบเทียบภายในกลุ่มฝึก พบว่า มีคะแนนในการทดสอบครั้งหลังต่ำกว่าการทดสอบครั้งแรกอย่างมีนัยสำคัญ ๕ มาตรฐาน คือ มาตรฐานไฮโคแพททิก มาตรฐานหวาดระแวง มาตรฐานไฮแคลสทีเนีย มาตรฐานจิตเภท และมาตรฐานไฮเซี่ยล อินโทรเวอชัน ผลการศึกษานี้สรุปได้ว่า การฝึกสมาธิทำให้ความวิตกกังวลในเยาวชน ๗ ลดลง เป็นผลให้คะแนนของบุคลิกภาพที่วัดโดย เอ็ม เอ็ม พี ไอ ลดลงไปด้วย ทำให้เกิดการเปลี่ยนแปลงของบุคลิกภาพไปในทางที่ดีขึ้น ซึ่งน่าจะนำมาใช้ในการฟื้นฟูเยาวชน ๗ เหล่านี้ต่อไป.

Thesis Title The Effects of Transcendental Meditation on some characteristics of Juvenile Offenders' Personality.

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ABSTRACT

The purpose of this study was to examine the effects of the Transcendental Meditation (TM) program on some characteristics of personality, as measured by the Minnesota Multiphasic Personality Inventory (MMPI). The subjects consisted of 59 male juvenile offenders with 14-19 years of age in the Observation and Protection Center, Central Juvenile Court. Before the experimental group learned the TM program, all of the subjects were asked to take the pretest MMPI. The subjects took the same post-test three months later. After three months of TM practice, the meditators who practiced more than 65 percent of the regular schedule consisted of 14 of the 39 experimental subjects and 20 subjects in the control group. T-test was used in analysing the scores from MMPI (10 clinical scales) :-

- Hypochondriasis (Hs)
- Depression (D)
- Hysteria (Hy)
- Psychopathic Deviate (Pd)
- Interest (Mf)
- Paranoia (Pa)
- Psychasthenia (Pt)

- Schizophrenia (Sc)
- Hypomania (Ma)
- Social Introversion Extroversion (Si)

Results showed that the scores of Mf and Pa scales of the TM meditators were significantly lower than the nonmeditators. Within the TM meditator group, there were 5 scales : Pd, Pa, Pt, Sc and Si in which the posttest scores were significantly lower than the pretest after three months of the TM program. The deep rest and release of stress, anxiety gained by the practice of the TM program was proposed to produce the changes in some characteristics of personality as measured by the MMPI. The beneficial effects of the TM program may be useful in the rehabilitation of juvenile offenders.

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CHAPTER 1

INTRODUCTION AND PURPOSE OF THE STUDY

BACKGROUND OF THE PROBLEM

Delinquency is a social problem of increasing concern to our society, it is not, by any means, a recent phenomenon. Our current concerns and attempts at prevention and amelioration are not without antecedents and are not independent of earlier thought and action on law, responsibility, and justice. Delinquency has existed in all cultures in all epochs of recorded history since there was any semblance of group of living. There is not a contemporary society in which misbehavior of young people does not exist and for which provision in law or custom is not made for the socialization of the individual and the management of persons whose social behavior is considered unsatisfactory to the dominant group.

Since 19th century, a new concept has been raised that, "the young offender is not a criminal, but lacking of experience, disorganization of environment, and mental state or personality disorders are the causes." The young offenders, when violated the laws, then, would be treated by the laws differently from the adult criminals. (Suvanaboopa, 1975) The measures to be taken to the juveniles then differed from the ones practiced to the adult-criminals. In Thailand, the process for the juveniles is different from the adult-criminals, by the statements of the Act Instituting the Juveniles Court of 1951 and the Juvenile Court Procedure Act of 1951, which separated the measures between the juveniles and the adults. (Suvanaboopa, 1975)

Our children are our greatest national resource. To the degree that they fail to contribute to the general welfare-or, even worse, that they become wasteful or destructive- they are damaged and our society is weakened. Delinquency involves personal suffering as well as a loss to society. A rise

in juvenile delinquency is a cause for serious concern for the future of the nation. (Quay, 1965) There is evidence that juvenile delinquency is increasing both in terms of absolute number of offenses committed and in terms of rate of delinquent behavior.

Shows the numbers, age, and sex of the youths sent to the Central Observation and Protection Center. (Statistics of the Central Juvenile Court, 1978)

YEAR	CHILDREN (7-14 yrs)			YOUNG PERSON (14-18 yrs)			TOTAL
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	
1971	392	26	418	3806	135	3941	4259
1972	368	38	406	3386	135	3521	3927
1973	371	63	434	3785	219	4004	4418
1974	643	44	687	4106	231	4337	5024
1975	358	41	399	3425	171	3596	3995
1976	326	36	362	3521	299	3820	4182
1977	439	51	490	3123	216	3339	3829
1978	287	72	359	3333	250	3583	3942

Hathaway and Monachesi (1963) stated that a society without complex social rules and norms would result in the absence of crime problems. On the other hand, a norms, and with incomplete rules would result in the increase of crime problems. What gives rise to juvenile delinquency? If it is increasing what are the causes? Some of the major explanations used for the cases of

juvenile delinquency with some consideration of the implications of interest in these etiologic theories for appropriate research strategy and for social action. Delinquent has been attributed to spiritual degeneration or malevolence, to biological disorders (including genetic, morphologic, neurologic, and metabolic imbalance), to experiential deficiencies (including inappropriate learning, stimulus deprivation, and psychopathogenic factors), and to social inadequacies (including cultural, sociological, economic, and political inequities).

PSYCHOLOGICAL THEORIES

Functional psychiatric disorders are also viewed as basic causes of delinquency. (Quay, 1965) The fundamental intrapsychic pathology is often attributed to faulty interpersonal relationships especially between parents and children in the early years (or months) of life. Disturbances in these relationships produce neurotic, psychotic, or character disordered behavior, some of which are antisocial. It becomes antisocial through one of several routes. In some cases the individual, because of neurotic guilt, seeks to be punished; in some cases the individuals because of displaced hostility, seeks revenge on society or symbolic persons or objects, in some cases the individual, because of panic arising from displaced anxiety, thinks that he is protecting his endangered psychic or physical being by attacking others or destroying property he erroneously believes is intent on harming him. The notion that there are personality characteristics which set delinquents and criminals apart from normals has a long history. The first assumption about the nature of these characteristics was that they had to do with morality or righteousness. However, as the psychology of personality began to develop, it appeared that other personality variables might be related to delinquent tendencies. Much of the early research, however, was inconclusive. In 1950 Schuessler and

Cressey (Quay, 1965) reviewed the results of 113 investigations and concluded that the combined results did not support the hypothesis that criminality and personality elements were associated. This conclusion now appears to warrant re-examination. Of the thirty different tests used in the studies which they reviewed, only four are presently considered valid enough to remain in current use in personality assessment. These four tests (Rorschach, MMPI, Guilford-Martin, and Porteus Mazes) had been employed in only twelve of the studies, and in half of these they had shown an ability to differentiate statistically the criminal group from whatever group had been used as a control. This suggests that the use of more valid tests coupled with greater sophistication in design and analysis might succeed where earlier work failed.

The systems of law and justice, as well as the science of criminology and rehabilitation have all emphasized the importance of various rehabilitation techniques e.g. continuing education, vocational training, and many systems for mental and moral developments in the rehabilitation program of the juvenile offenders in the Observation and Protection Centers. Many lines of thinking and evidence from scientific and social researches in many countries indicated that the Transcendental Meditation (TM) program can significantly improve mental and moral development through the development of an unbounded awareness which released the accumulated stresses and anxiety and, provided the state of consciousness for the unfoldment of fuller creative mental potentials. Furthermore, the TM program has been successfully use in the rehabilitation program of prisoners and juvenile offenders in some countries e.g. the USA, India, Sweden, Germany and Scotland (Orme-Johnson & Farrow, 1977). Therefore, it is very interesting to examine and evaluate the effects of the TM program on some characteristics of personality in the juvenile offenders in which the

personality characteristics have not developed into concrete states and, therefore, can be improved and easily developed during the rehabilitation program.

The research will extend the beneficial effects of the TM program into the field of application in the correction of juvenile offenders to promote better attitude and behaviors, and to prevent further criminal tendency.

The influences of the TM program on personality variables

There are many studies which show that the TM program can improve the development of personality. (Orme-Johnson & Farrow, 1977) Personality is the expression of an individual's subjective experience and level of consciousness and is correlated with the physiological integration. Thus, any study on personality must include investigation into some physiological correlates. Indeed, many of the psychological changes reported in the journals are also substantiated by the metabolic, EEG biochemical and other physiological changes reported in the experimental subjects. (Orme-Johnson & Farrow, 1977)

One major obstacle to the full expression of personality is anxiety. Many studies demonstrated that anxiety can be markedly decreased through the TM program. These findings of reduced anxiety are reinforced as expected by biochemical and physiological measurements, e.g. blood lactate, plasma cortisol decreases in individual practicing the TM program. Reduced phasic skin resistance responses, persistent alpha waves and low levels of heart rate and respiration rate all provide evidence of reduced anxiety measured on a personality inventory. (Orme-Johnson & Farrow, 1977)

Research on the TM program has covered a wide range of physiological, psychological, and sociological variables -- far wider than research on most methods of treatment that have ever been used in any other methods of medical or social rehabilitation. The results of this research enable one to consider

the benefits of the TM and TM Sidhi program in terms of eleven qualities --
the Fundamentals of Rehabilitation :-

- increasing creativity
- increasing adaptability
- increasing stability
- increasing purification
- increasing integration
- growth
- decreasing anxiety
- decreasing depression
- decreasing rigidity
- decreasing hostility
- decreasing aggression

The development of these qualities can be seen as the keystone to the prevention of all antisocial behaviors and the ultimate expression of this development is a higher state of consciousness that enables the individual to perceive all actions in light of the total workings of man and nature.

Orme-Johnson et al, (1971) found that the TM program reduced the level of stress in prisoners, as measured physiologically by number of spontaneous skin resistance responses (SSRR). The study showed that regular practice of the TM program was positively correlated with the degree of increases in autonomic stability. In the same study, they found that the TM program reduced the level of stress in prisoners, as measured psychologically by the Minnesota Multiphasic Personality Inventory (MMPI), given before and after two months of continued practice of the TM technique.

Ballou (1973) found that three measured on prisoners practising the TM technique indicated :

1. A reduction in anxiety as measured by the Spielberger State-Trait Anxiety Inventory (STAI)
2. A reduction in prison rule violations
3. An increases in time spent in positive activities

PURPOSE OF THE STUDY

The purpose of this study is

1. To investigate the effect of the TM program on some characteristics of Thai juvenile offenders in the Central Observation and Protection Center.
2. To compare the effect of the TM program on some characteristics between TM meditators and non-meditators for the experimental period of 12 weeks.
3. To compare some characteristics and the period of time before and after mediation.

SIGNIFICANCE OF THE STUDY

1. To evaluate the influence of the TM program on some characteristics in the juvenile offenders.
2. To evaluate the influence of the TM program on the rehabilitation and development of personality in the juvenile offenders.
3. To assess the effectiveness of the TM program in facilitating some characteristics of juvenile offenders.

HYPOTHESIS

The experiments in this study is based on the following hypothesis

1. Subjects practicing the TM program would score significantly lower than non-meditators on some characteristics of personality, as measured by the MMPI scales after a period of three months of practicing the TM program.

2. The experimental subjects would show significantly lower MMPI posttest scores on some characteristics of personality after three months of practicing the TM program as compared to the pretest scores before they learn the TM program.

CHAPTER 2

RELATED LITERATURE

TRANSCENDENTAL MEDITATION (TM)

The Transcendental Meditation (TM) Program was brought to the world in 1958 by Maharishi Mahesh Yogi. (Orme-Johnson & Farrow, 1977) A physic graduate of Allahabad University in India, Maharishi studied for 13 years with his master in the Himalayas before beginning to teach the TM program. The TM program is a form of meditation involving the use of special sounds known in Sanskrit syllable as the "MANTRA". (Orme-Johnson & Farrow, 1977) This program can be introduced in a few consecutive days from the qualified teacher TM and then practiced for only fifteen to twenty minutes each morning and evening. The TM program is a specific method of allowing the activity of the mind to settle down while one sits comfortably with eyes closed, this mental process automatically produces a physiological response conducive to both deep rest and increases wakefulness.

Philosophy and Technique of Transcendental Meditation

The philosophy used to explain the technique of TM is based on the concept that, just as matter has the potentiality of creating different amounts of levels of energy, thought likewise has the potentiality of creating different amounts levels of energy. At progressively finer and more fundamental layers of matter there is more potential energy available. The philosophy of TM holds that as one experiences finer or more abstract layers of thought the energy and creative intelligence progressively become greater. Maharishi (Orme-Johnson & Farrow, 1977) holds that the quality of any action of an individual is directly dependent upon the quality of that individual's thought, that is, if an individual is able to appreciate thought at a finer level and therefore use more of his thought or mental potentiality, he will act with greater efficiency, creativity, and clarity. Maharishi speaks of a source of thought that is a field of

maximum potentiality and is the essential constituent of all field of conscious existence. He states that by systematically and regularly contacting this field an individual can unfold his full mental creative potentialities.

The program may be defined as turning the attention inwards towards the subtle levels of a thought until the mind transcends the experience of the subtles state of the thought and arrives at the source of thought. He explains that this process expands the conscious mind and at the same time brings it into full contact with a reservoir of energy and creative intelligence. He emphasizes that the TM program is practiced as a preparation for successful activity and not as an escape from the problems of life. He states that by spending a few minutes each day in contacting the individual develops his full potential. A common goal of meditations is realization of the essential constituent of creation. To attain this goal is easy and naturally accomplished by the practice of TM program. Maharishi says that during TM, as the awareness spontaneously farthoms finer and finer aspects of thought until it transcends the finest aspect and arrive at the state of absolute awareness, the experiencer realizes the essential constituent of creation, which is the experiencer's own "SELF".

THE PSYCHOLOGICAL EFFECTS OF TRANSCENDENTAL MEDITATION

The psychological correlates of excessive stress and autonomic instability have been well defined. (Orme-Johnson & Farrow, 1977) Anxiety, poor attention span, impulsive motor behavior, drug abuse, reduced ego strength and poor performance are among a variety of negative psychological effects correlated with stress and autonomic instability. Until recent, the evidence on the possibility of improving autonomic instability and reducing stress through the TM program, the medical community had almost unanimously assumed that the degree of autonomic stability or instability was an invariable physiological characteristics for each

person. (Orme-Johnson, 1973) Dr. Elmer Green's psychophysiological principle suggests, however, that the physiological effects of the TM program have corresponding psychological effects. (Green & Walters, 1970) The brain is the master regulator which controls and mediates all feelings, thoughts and behaviors. Integration of brain function should lead not only to improvement in health but also to improvements across a wide range of emotional and mental processes, and ultimately to significant improvements in performance and behaviors.

THE RESEARCH ON TM PROGRAM

The TM program is the meditative system that has by far been studied with the most exacting scientific and methodological procedures.

Seeman et al (1972) administered Shostrom's Personal Orientation inventory to eight males and seven females before their instruction in TM. A control group of non-meditators was tested at the same time. The two groups did not differ significantly on any of the test scales in the pretest. However, on a post-test, there were significant differences on six of the 12 scales, all in the direction of self-actualization. Stek and Barry (1973), Hjelle (1974), and Orme-Johnson & Duck (1974) obtained similarities results in their studies. The experimental group of meditators scored significantly higher than the control group of nonmeditators on the self actualization scales.

Davies (1974) compared the effects of TM program and another relaxation technique on anxiety and self - actualization. It was finding that subjects who regularly practiced either TM or progressive relaxation showed a significant improvement in self - actualization and reducing anxiety.

Shector (1975) administered psychological tests measuring creativity, intellectual performance, anxiety and a number of personality variables to a group of subjects practising TM. The finding indicated that the TM technique

could improve all measures of psychological health in this study.

TM research related MMPI and juvenile offenders

Orme-Johnson et al, (1971) administered MMPI and measured spontaneous skin response in 12 prisoners from the Narcotics Rehabilitation Act Program before they began TM and again two months later. Meditating subjects were compared with a control group of 7 nonmeditating prisoners measured at the same time. The results of three groups were compared : regular meditators had the percentage of decrease in spontaneous skin resistance responses was significantly greater for meditators than for irregular meditators or for control subjects. On the MMPI regular meditators decreased significantly more than control on scale Psychasthenia, and on scale Social Introversion. Regular meditators also decreased more than irregular meditators on scale Psychasthenia.

John P. Child (1973) use the TM program as a therapy with juvenile offenders in the USA. The TM program was the treatment, or independent variables. Self-actualization, anxiety, happiness, use of drugs, interpersonal relationship, and acceptable social behavior were dependent variables. The subjects were tested before and two months after they began TM. The Personal Orientation Inventory (POI), the Taylor Manifest Anxiety Scale, self - and parent - report questionnaires, and the court report were the measures used. A significant reduction in anxiety was found on the Taylor Manifest Anxiety Scale. The questionnaires reflected significant positive change for both subjects' and parents' reports. Drug uses ceased or, for one subject, decreased. The court report was uniformly favorable at the end of two months of treatment. The group demonstrated a trend towards increased self - actualization by their improvement on 6 scales of the POI,

Orme-Johnson et al, (1972) used the TM program in six staff members of

a U.S. Army drug abuse program. They were tested on the MMPI and other tests before they were instructed in TM and again ten weeks later. The experimental group showed a significantly greater decrease on the Manifest Taylor, Hypochondriasis, and Schizophrenia scales than the controls. Meditators also showed a greater overall reduction on MMPI scales than nonmeditators.

The TM program was also shown to be a valuable aid in the treatment of patients with various mental disorders. (Bloomfield, 1975) The TM program proved to be a useful therapy for anxiety neurosis, obsessive - compulsive neurosis, depression, drug abuse, and psychosomatic disease. In general, patients practicing the TM program were found to improve at an unusually fast rate and to benefit more from each of their therapy sessions.

LOCAL RESEARCH ON MEDITATION

In the period of 1970-1971, Suwansithi et al (cf: Sngounsiritram, 1974) at Siriraj Medical School of Mahidol University, studied the effects of Buddhist Concentrative Meditation towards the academic performance in 32 medical students (male and female) within the age group of 19-23 years. These students practiced the meditation five days a week for the period of 20 weeks. It was found that 62% felt more pleasure towards study. They also had improvement in memory and alertness, reduced frustration and anger 85%.

Sngounsiritram (1974) studied the influence of meditation on academic achievement in 56 students at sixth grade of the elementary school. It was found that the group of male meditators had academic achievement significantly higher than nonmeditating male controls in three of the seven subjects.

Tapunya (1981) studied the effects of TM on moral judgement in 60 high school students, within age group of 16-18 years. The results showed that meditators' scores were significantly higher than those of nonmeditators, and the

regular meditators scores were also significantly higher than those of irregular meditators and nonmeditators.

Pipatveravat (1981) studied the effects of TM on intelligence and learning ability. She used the same subjects as those reported in (Tapunya, 1981), the finding of this study indicated that the meditators showed a significant increase in intelligence and learning ability than the controls. The regular meditators also show significant increase in intelligence and learning ability than the irregular meditators.

PERSONALITY

MEANING OF PERSONALITY

The term "personality" comes from the Latin word personal meaning "mask". (Hurlock, 1956) To the Romans, persona meant "as one appears to others", not as one actually is. From this connotation of the word persona, our popular idea of personality as the effect one has on others has been derived. What a person is how he thinks and feels, and what is included in his whole psychological make up are, to a great extent, revealed through his behavior. Personality, then, is not one definite, specific attribute; rather, it is, as Woodworth and Marquis claimed, the "quality of the individual's total behavior. (Hurlock, 1956)

Personality refers to the characteristic patterns of behavior and ways of thinking that determine a person's adjustment to his environment. Personality is shaped by inborn potential as modified by experiences common to the culture and sub culture group (such as sex roles) and by the unique experiences that affect the person as an individual. The major theoretical approaches to an understanding of personality include trait, psychoanalytic, social learning, and humanistic theories.

PSYCHOANALYTIC THEORY

Sigmund Freud is the founder of psychoanalysis. (Freedman et al, 1977) Psychoanalytic concepts have so widely permeated the training and practice of modern psychiatry that they have come to be regarded as a fundamental part of the understanding and approach to mental and emotional disorders.

THE STRUCTURE OF PERSONALITY

The personality is made up of three major systems: the id, the ego, and the superego. (Hall & Lindzey, 1978) Although each of these provinces of the total personality has its own functions, properties, components, operating principles, dynamisms, and mechanisms, they interact so closely with one another that is difficult if not impossible to disentangle their effects and weight their relative contribution to human behavior. Behavior is nearly always the product of an interaction among these three systems; rarely does one system operate to the exclusion of the other two.

THE ID

The id is the original system of the personality; it is the matrix within which the ego and the superego become differentiated. The id consists of everything psychological that is inherited and that is present at birth, including the instincts. It is the reservoir of psychic energy and furnishes all the power for the operation of the other two systems. It is in close touch with the bodily processes from which it derives its energy. Freud called the id the "true psychic reality" because it represents the inner world of subjective experience and has no knowledge of objective reality.

THE EGO

The ego comes into existence because the needs of the organism require appropriate transactions with the objective world of reality. The hungry person

has to seek, find, and eat food before the tension of hungry can be eliminated. This means that the person has to learn to differentiate between a memory image of food and an actual perception of food as it exists in the outer world. Having made this crucial differentiation, it is then necessary to convert the image into a perception, which is accomplished by locating food in the environment. In other words, the person matches the memory image of food with the sight or smell of food as they come to the person through the senses. The basic distinction between the id and the ego is that the id knows only the subjective reality of the mind whereas the ego distinguishes between things in the mind and things in the external world.

THE SUPEREGO

The third and last system of personality to be developed is the superego. It is the internal representative of the traditional values and ideals of society as interpreted to the child by its parents, and enforced by means of the system of rewards and punishments imposed upon the child. The superego is the moral arm of personality; it represents the ideal rather than the real and it strives for perfection rather than pleasure. Its main concern is to decide whether something is right or wrong so that it can act in accordance with the moral standards authorized by the agents of the society.

THE DYNAMICS OF PERSONALITY

In nineteenth century physicists were firmly insisting, energy has to be defined in terms of the work it performs. If the work consists of a psychological activity such as thinking, then it is perfectly legitimate, Freud (Hall & Lindzey, 1978) believed to call this form of energy psychic energy. The point of contact or bridge between the energy of the body and that of personality is the id and its instincts. Freud did not pretend to know how many instincts

there are, he did assume that they could all be classified under two general headings, the life instincts and the death instincts.

The life instincts serve the purpose of individual survival and racial propagation. Hunger, thirst, and sex fall in this category. The form of the energy by which the life instincts perform their work is called libido.

The life instinct to which Freud paid the greatest attention is that of sex, the sex instinct is not one instinct but many. That is, there are a number of separate bodily needs that give rise to erotic wishes. Each of these wishes has its source in a different bodily region referred to collectively as erogenous zones.

The death instincts, or, as Freud sometimes called them the destructive instincts. An important derivative of the death instincts is the aggressive drive. Aggressiveness is self-destruction turned outward against substitute objects. A person fights with other people and is destructive because the death wish is blocked by the forces of the life instincts and by other obstacles in the personality that counteract the death instincts.

ANXIETY

Freud (Freedman, Kaplan & Sadock, 1972) believed that the conflict between the id impulses-- primarily sexual and aggressive instincts-- and the restraining influences of the ego and superego constituted the motivating source of personality. Anxiety is a state of uncomfortable tension that the person is motivated to reduce. One way of reducing anxiety is to express the impulse in disguised form, thereby avoiding punishment by society and condemnation by the superego. Another method of reducing anxiety, called repression, is to push the impulse out of awareness into the unconscious.

PERSONALITY DEVELOPMENT

Freud (Freedman, Kaplan & Sadock, 1972) believed that the personality develops largely as the result of what occurs at certain fixed stages during the first five years of life. Individual differences in adult personality reflect the manner in which the person coped with the conflicts that may have arisen during the stages of psychosexual development. They include:

- (1) Oral Stage This is the earliest stage of development. The infant's needs, perceptions, and modes of expression are primarily centered in the mouth, lips, tongue, and other organs related to the oral zone. The oral zone maintains its dominant role in the organization of the psyche through approximately the first 18 months of life.
- (2) Anal Stage This stage of psychosexual development is prompted by maturation of neuromuscular control over sphincters, particularly the anal sphincters, thus permitting more voluntary control over retention or expulsion of feces. This period, which extends roughly from 1 to 3 years of age, is remarked by a recognizable intensification of aggressive drives mixed with libidinal components in sadistic impulses.
- (3) Phallic Stage It begins sometime during the third year of life and continues until about the end of the fifth year. The phallic phase is characterized by a primary focus of sexual interest, stimulation, and excitement in the genital area. The penis becomes the organ of principal interest to children of both sexes, with the lack of a penis in the female being considered as evidence of castration.
- (4) Latency Stage This is the stage of relative quiescence or inactivity of the sexual drive during the period from the resolution of the Oedipus complex until pubescence (from about 5 or 6 years until about 11 to 13 years). The institution

of the superego at the close of the oedipal period and the further maturation of ego functions allow for a considerably greater degree of control over instinctual impulses. Sexual interest during this period are generally thought to be quiescent.

(5) Genital Stage The genital or adolescent phase of psychosexual development extends from the onset of puberty in about 11 to 13 years until the adolescent reaches young adulthood. The physiological maturation of systems of genital (sexual) functioning and attendant hormonal systems leads to an intensification of drives, particularly libidinal drives. This intensification produces a regression in personality organization, which reopens conflicts of previous stages of psychosexual development and provides the opportunity for a reresolution of these conflicts in the context of achieving a mature sexual and adult identity.

PERSONALITY RESEARCH IN JUVENILE OFFENDERS

Healy and Broner (1936) made a comparative study of the male juvenile delinquents and normal youths from 133 families. The subjects were 132 male delinquents and 105 youths. They found that the delinquents had higher dissatisfaction towards family, had more unhappy life, had higher conflict reaction, had more frequency of running away from home, had less self confidence, had more insecurity and dislike of the family than the normal youths.

Glueck and Glueck (1950) studied the behaviours of juvenile delinquents towards others of the 65 males juvenile delinquent subjects, aged from 14 to 18 years old. Through projective tests, they found that the juvenile delinquents frequently showed the aggression towards others, hostility, tendency against authority, disability of emotional control and destructive feelings.

Herskovitz, Levine and Spirak (1959) made a comparative study of 26 juvenile delinquents and normal children from high socio-economic group and found

a significant difference between the families of the two groups. They found that, the parents or the guardians of the juvenile delinquents had given less love and psychological warmth to the youths, and resulted in the lack of warmth, frustration, rejection feelings and hostility to the authority figures, and frequently showed aggressions towards the others higher than the normal group.

Gottfried (1959) studied the differences between delinquent and non-delinquents adolescent males. He found that delinquents and non-delinquents differ in goal-attainment was supported by the findings of the study. The hypothesis that delinquents and non-delinquents differ in "aggression" as defined in the investigation was also confirmed.

LOCAL RESEARCH IN JUVENILE DELINQUENTS

Sriglall et al, (1978) studied the attitudes of the students in Chiang Mai compared with the juvenile delinquents in Chiang Mai Observation and Protection Center, and found that the attitude towards self of the juvenile was lower than the attitudes towards society and family, and attitudes towards self and family of the students were better than the juvenile delinquents.

Werakitpanit (1978) found that there were significant differences of the MMPI profiles between juvenile delinquents and adolescents on the Psychopathic Deviate, Familial Discord, Authority Problems, Social Alienation and Self Alienation.

Suppatchai (1980) studied 71 males juveniles from the Annex of Training School, 113 male juveniles from the Training School, of the Central Observation and Protection Center, Central Juvenile Court, and 91 students from the male secondary school. All samples age from 14 to 18 years old. The results of the study are as follows:

1. The juvenile delinquents had the higher mean in each scale of the personality test than the students' and also had higher score in each of the discipline disconformity item than the students'.

2. The juvenile delinquents of the Annex of the Training School had higher scores in self alienation and need for motivation than the juveniles of the Training School, and the juveniles of the Training School had higher scores in rulebreaking and disattentiveness than the juveniles of the Annex of Training School.

CHAPTER 3

MATERIAL AND METHOD

DEFINITION OF TERMS

Transcendental Meditation (TM) : A form of meditation practice involves the use of mantra.

Transcendental Meditator : A juvenile offender of the Training School, the Central Observation and Protection Center, Central Juvenile Court, sits in a comfortable posture and applying the mantra silently according to the technique taught by Maharishi Mahesh Yogi for about twenty minutes and for two times a day; once in the morning and once in the evening, and practices TM program more than 65 percent of the schedules time during the three month interval.

Non-meditator : A juvenile offender of the Training School, the Central Observation and Protection Center, Central Juvenile Court, is not predisposed to beginning of the TM program, is instructed by the experimenter to sit easily with eyes closed regularly twice a day, 20 minutes in the morning and evening for the same period of three months.

Personality : as defined by Hathaway & McKinley (1951) refers to some characteristics of personality 10 scales from the MMPI :-

1. The Hypochondriasis Scale (Hs) The Hs scale (33 items) is a measure of the amount of abnormal concern about bodily function. Persons with high Hs scores are unduly worried over their health. They frequently complain of pains and disorders which are difficult to identify and for which no clear organic basis can be found.

2. The Depression Scale (D) This second clinical scale of 60 items was established empirically to measure the degree of the clinical pattern of

depression. This mood is characterized generally by pessimism of outlook on life and the future, feelings of hopelessness, slowing of thought and action, and often thinking about death and suicide.

3. The Hysteria Scale (Hy) The Hy scale has 60 items and measures the degree to which the subject is like patients who have developed conversion-type hysteria symptoms. These patients appear to use physical symptoms as a means of solving difficult conflicts or avoiding the responsibility. The need for a personality measure to reflect such a predisposition before breakdown was partly the motivation behind the development of this scale.

4. The Psychopathic Deviate Scale (Pd) The Pd scale uses 50 items to measure the similarity of the subject to a group of persons whose main difficulty lies in their absence of deep emotional response, their inability to profit from experience, and their disregard of social mores.

5. The Interest Scale (Mf) This scale of 60 items measures the tendency toward masculine or feminine interest patterns. Separate T-scores are provided for the two sexes. When the score is above average, it reflects relatively more feminine interests for men and more masculine interests for women.

6. The Paranoia Scale (Pa) The Pa scale has 40 items. It was derived by contrasting normal persons with a group of clinic patients who were characterized by suspiciousness, over sensibility and delusions of the persecution.

7. The Psychasthenia Scale (Pt) This scale with 48 items measures the similarity of the subject to psychiatric patients who are troubled by phobias or compulsive behavior.

8. The Schizophrenia Scale (Sc) The 78 items of the Sc scale measures the similarity of the subject to psychiatric patients who are characterized by bizarre and unusual thoughts or behavior.

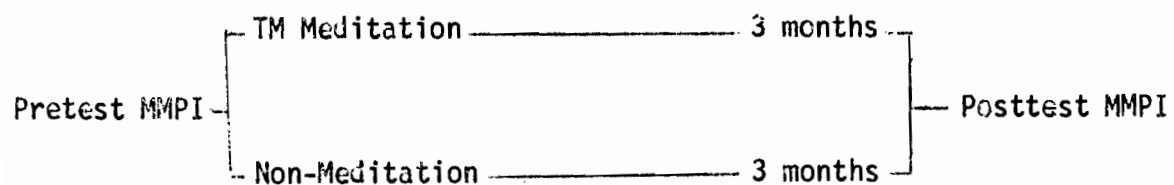
9. The Hypomania Scale (Ma) The Ma scale has 60 items which measures the personality factors characteristic of persons with marked over productivity in thought and action.

10. The Social Introversion Extroversion Scale (Si) The Si scale of 70 items measures the tendency to participate in social contact with others. A high score reflects a tendency to withdraw and a low score suggests a socially active person.

STUDY DESIGN

This study was design for the experimental study of the three month treatment. All subjects were requested to take the individual test before and after three months. The subjects were divided into one experimental group and one control group. The experimental group was made up of TM meditators who meditated more than 65 percent of the scheduled time during the three-month interval. The result of the study was based on the pretest and posttest results of the two groups. The experimental design was shown in the figure 1.

FIGURE 1. Experimental Design



METHODS

SUBJECTS All subjects were chosen from the juvenile offenders of the Central Observation and Protection Centre, Central Juvenile Court, Bangkok, Thailand. The age group of them are 14-19 years. Thirty nine subjects volunteered to be experimental group, which were taught the TM program and another 20 subjects

volunteered to be the control group which were not taught TM. The practice of TM program was not compulsory. Therefore, it is important to set up and arbitrary criteria for differentiating the meditators from the nonmeditators.

The group of subjects practicing the TM program were asked to indicated truthfully on a card how many times they had meditated twice a day, once a day, or not at all. From these information the percentage of number of time of meditation were calculated. A TM meditator was defined as one with a mean weighted score of 65 percent or greater number of time of meditation according to the schedule during the three months periods. Other meditators were not used if they practiced less than 65 percent of the schedule time for this study.

TEST INSTRUMENT The test instrument used to determine some characteristics of personality was the Minnesota Multiphasic Personality Inventory (MMPI), developed by Hathaway & McKinley (1942) and the manual of this test developed later in 1943. Kasemsak Poomsrieko (1965) translated the test into Thai. All the items of the test were classified into 26 headings as follows:

1. General health (9 items)
2. General neurologic symptoms (19 items)
3. Cranial nerves (11 items)
4. Motility and coordination (6 items)
5. Sensibility (5 items)
6. Vasomotor, trophic, speech, secretory problems (10 items)
7. Cardiorespiratory system (5 items)
8. Gastrointestinal system (11 items)
9. Genitourinary system (5 items)
10. Habits (19 items)
11. Family and marital relations (26 items)

12. Occupational problems (18 items)
13. Educational problems (12 items)
14. Sexual attitude (16 items)
15. Religious attitudes (19 items)
16. Political attitudes - law and order (46 items)
17. Social attitudes (72 items)
18. Affect, depressive (32 items)
19. Affect, manic (24 items)
20. Obsessive and compulsive states (13 items)
21. Delusions, hallucinations, illusions ideas of reference (31 items)
22. Phobias (29 items)
23. Sadistic, masochistic trends (7 items)
24. Morale (33 items)
25. Items primarily related to masculinity-femininity (55 items)
26. Items to indicate whether the individual is trying to place himself in an improbably acceptable light (15 items)

THE SCALES AND THEIR DESCRIPTIONS

A. The Validity Scales

1. The L Scale.

The scale is composed of 15 items. Its contents are concerned with aggressive feelings, bad thought and lack of control or conformity. High scores on this scale imply that the subject is attempting to be "good" in the eyes of others.

2. The F Scale.

The scale has 64 items. These items were chosen because they covered a variety of content. In contrast to the L Scale, high scores on this scale

imply that the subject tends in the direction of adults. These items, at the same time, were chosen because they covered a variety of content. Moreover, in contrast to the L Scale, high scores on this scale imply that the response of the subject has made are in the direction of faking "bad".

3. The K Scale

This scale has 30 items. It is used essentially as a correction factor to sharpen the discriminatory power of the clinical variables measured by the Inventory. It is related to the L and F attitudes but is somewhat more subtle and probably taps a slightly different set of distorting factors. A high K score represents defensiveness against psychological weakness, a low K score represents a willingness to exhibit personal defects and troubles.

B. The Clinical Scales as defined previously on page 22-24. The scales are shown in the table 1.

TABLE 1. Shows the scales, abbreviation and the numbers' items of each scale.

Scales	Items
1. Hypochondriasis (Hs)	33
2. Depression (D)	60
3. Hysteria (Hy)	60
4. Psychopathic Deviate (Pd)	50
5. Masculinity-Femininity (Mf)	60
6. Paranoid (Pa)	40
7. Psychasthenia (Pt)	48
8. Schizophrenia (Sc)	78
9. Hypomania (Ma)	46
10. Social-Introversion (Si)	70

In this study on the MMPI (translated into Thai by Kasemsak Poomsrieko) the test-retest Pearson Product Moment Correlation Coefficient in the sampling group of juvenile offenders (N = 40) is shown in the table 2.

TABLE 2. Shows the reliability of the MMPI test.

	Scales	r
Validity Scales	L	.64
	F	.58
	K	.56
Clinical Scales	Hs	.41
	D	.53
	Hy	.29
	Pd	.59
	Mf	.25
	Pa	.54
	Pt	.78
	Sc	.73
	Ma	.73
	Si	.35

The above table shows that the reliability in 10 clinical scales. There are only 6 scales which show high reliability such as: D, Pd, Pa, Pt, Sc and Ma and 4 scales are not sufficiently reliable have also been included in this study.

PROCEDURE

The MMPI was administered to all subjects to assess their personality. The pretest was administered to the whole group of subjects and subjects were motivated to take the task seriously and were not given the time limit for completing the test. Three months later all subjects were given the same test again as posttest in the same manner.

The subjects who volunteered to learn the TM program were taught by a qualified instructor from the TM center in Bangkok, according to the standard four days format. Thereafter, the correctness of the subjects' meditation was frequently verified by the instructors. Everyday throughout the three-month interval, the meditators indicated on a card what percentage of the time they have meditated: twice a day, once a day or not at all. After three months, there are 14 TM meditators from 39 offenders who had a mean weighted score of 65 percent or greater, and the other subjects were discarded.

The control group (N = 20) was instructed by the experimenter to sit easily with eyes closed. The control subjects practiced this procedure regularly twice a day - 20 minutes in the morning and evening for the same three-month period. They also sit together with the TM meditator to eliminate the environmental difference.

SCORING

The scoring of the test was performed according to the instruction given by Hathaway and McKinley (1951). A 1 point score was given when the subjects answered according to the T or F choice as shown in the test key.

STATISTICAL ANALYSIS OF DATA

1. Arithmetic means and the standard deviations

1.1 The arithmetic means were calculated to find the means of the

data. The formula used was :

$$\bar{X} = \sum X/N$$

\bar{X} = the arithmetic mean

$\sum X$ = the sum of the scores of all the samples of each group

N = the numbers of the samples in each group

1.2 The standard deviations were calculated to find the characteristic of the distribution of the data or the tendencies of dispersion.

The formula used was :

$$S.D. = \sqrt{\sum X^2/N - (\sum X/N)^2}$$

S.D. = the standard deviation

$\sum X^2$ = the sum of the square of the scores of all the samples

2. To test the significances of the differences of the means between the two groups of each scale, a test of t-distribution was calculated according to the formula.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

3. To test the mean differences of the scores within each group between the pretest and the posttest results were calculated as follows:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left\{ \sum D^2 - (\sum D)^2/n \right\} / n(n-1)}}$$

A significance of 0.05 level would be accepted.

CHAPTER 4RESULTSTHE GENERAL DATA

The 34 subjects were the juvenile offenders within the age group of 14-19 years. All subjects were divided into the TM meditator group and the control group or nonmeditator. TM meditator was made up of 14 subjects and the other was made up of 20 subjects. Majority of subjects were from low educated background, majority of Buddhism, were retained because of the offence, usually, related to the property theft. General data of subjects are shown in the table 3-7.

TABLE 3. Distribution of the ages of the subjects

GROUP	AGE						TOTAL
	14 yrs.	15 yrs.	16 yrs.	17 yrs.	18 yrs.	19 yrs.	
TM meditator	2	-	2	7	1	2	14
Nonmeditator	3	2	4	6	3	2	20
Total	5	2	6	13	4	4	34

The table shows that majority of the subjects are 17 years of age.

TABLE 4. Distribution of the level of education of the subjects

GROUP	LEVEL OF EDUCATION				TOTAL
	PRATHOM		MATHAYOM		
	1-4	5-6	1-3	4-6	
TM meditator	7	2	5	-	14
Nonmeditator	8	5	6	1	20
Total	15	7	11	1	34

Majority of subjects are from the group of low education.

TABLE 5. Religion of the two groups of subjects

Group	Buddhism	Islam	Total
TM meditator	14	-	14
Nonmeditator	19	1	20
Total	33	1	34

The majority of subjects are Buddhists.

TABLE 6. Frequency of the offences of the two groups of subjects

Group	Frequency of the offences				Total
	1	2	3	4	
TM meditator	12	2	-	-	14
Nonmeditator	11	5	3	1	20
Total	23	7	3	1	34

The majority of the subjects made the first offence.

TABLE 7. The nature of the offences of the subjects.

Group	Nature of the offences against				Total
	Property	Life & Person	The law for possession of fire arms & narcotic drugs	Sexual Assaults	
TM meditator	12	2	-	-	14
Nonmeditator	18	-	2	-	20
Total	30	2	2	-	34

The majority of subjects had offended against property.

PERSONALITY ASPECT

The results of one-tailed t-test, comparing the pretest-posttest personality scores between the two groups of subjects were presented in table 8-18. The t-test result showed that the personality of the TM meditator different from the nonmeditator in the pretest in only one scales (Mf), and

other 9 scales do not differ significantly. At the posttest, the TM group differs from the control group in Pa scale significantly after three months of the TM program ($t= 2.1471, 1.697 P<.05$). In the scale Pt, Sc & Si, there was some trend of difference but do not show statistical significance.

The results of one - tailed t-test, comparing the pretest-posttest personality scores within each group of subjects are presented in table 19-39. The t-test results show that the personality score of the TM group at the posttest differs significantly from the pretest in 5 scales (Pd, Pa, Pt, Sc and Si) at .05 level. There are also tendencies of the decrease in the D and Mf scales. In the nonmeditator group, Si scale also differs significantly at .05 level. Table 40 shows the Mean and the S.D. of the two groups of subjects.

TABLE 8. Shows t-independent test of the two groups of subjects.

Scales	Pretest TM Med. Non Med.	Posttest TM Med. Non Med.
Hs	.8229	.3303
D	.9531	.9031
Hy	.1439	.0794
Pd	1.2607	.6180
Mf	1.7500*	.2491
Pa	.1153	2.1471*
Pt	1.3882	1.3506
Sc	.6296	1.3527
Ma	.5235	.9614
Si	1.4734	1.2170

$T_{.05}(32) = 1.697$

* Significant at .05 level

FIGURE 2. Shows the change in Hs scale in the two groups of subjects.

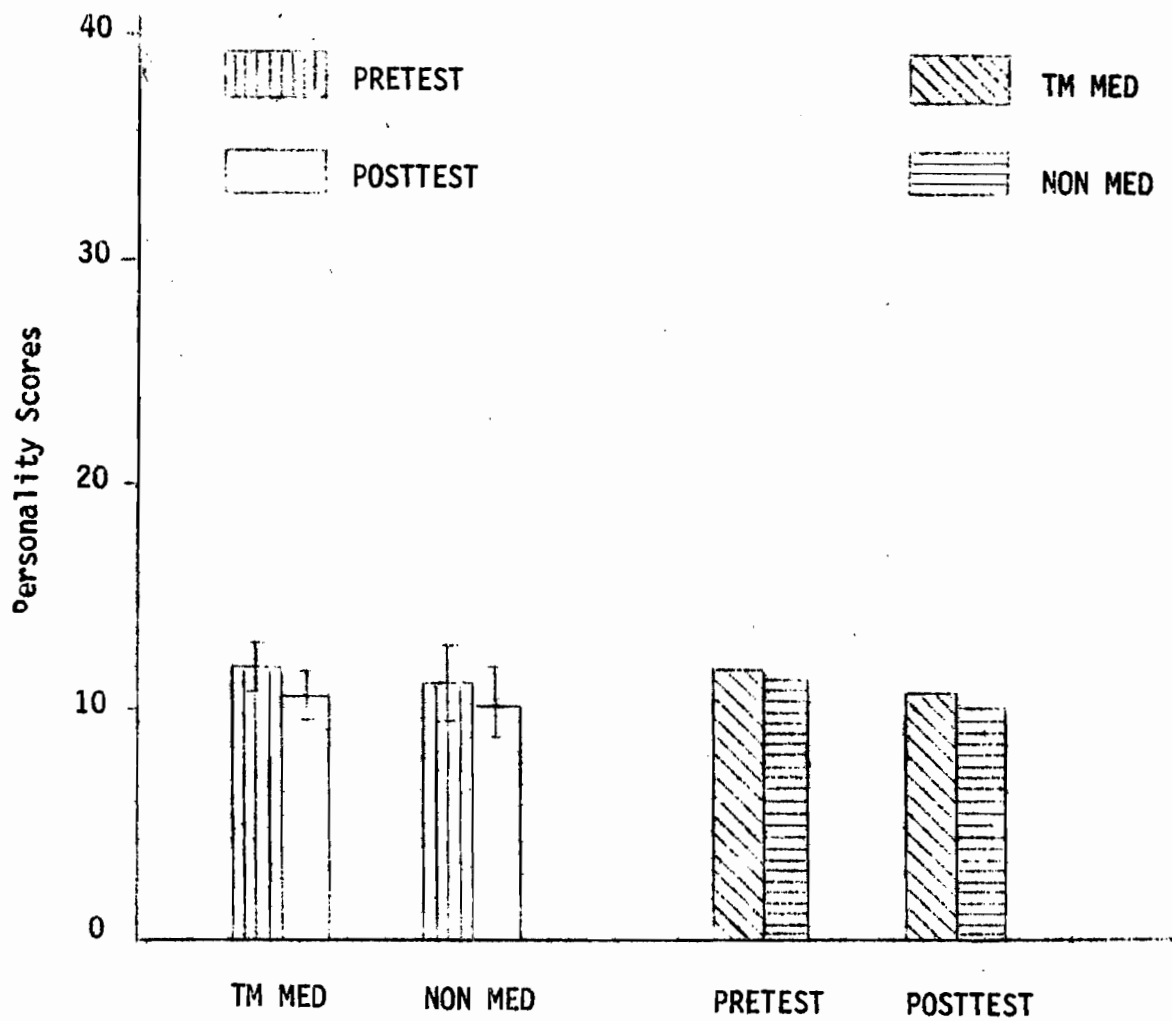


TABLE 9. Shows the change of the mean in Hs Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	11.86	2.66	.8229	10.57	2.47	.3303
Non Meditator	20	11.00	3.43		10.20	4.05	

$t_{.05} (32) = 1.697$ Not Significant

Not Significant

Table 9 shows that in Hs Scale there is no significant difference between the two groups of subjects in the pretest and posttest.

FIGURE 3. Shows the change in D Scale in the two groups of subjects.

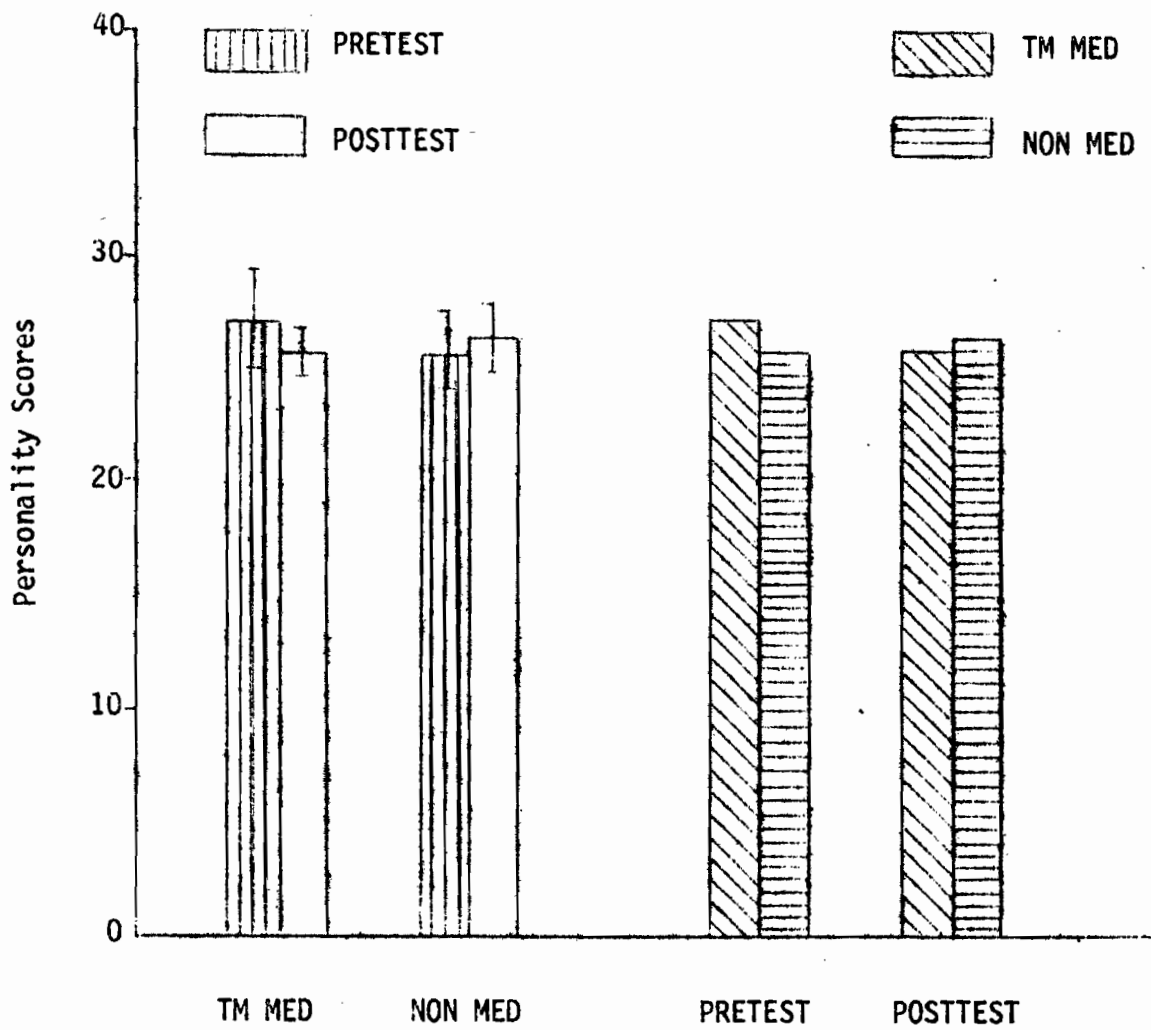


TABLE 10. Shows the change of the mean in D Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	27.57	5.62	.9531	25.00	2.77	.9031
Non Meditator	20	25.80	4.89		26.10	4.33	
$t_{.05}(32) = 1.697$		Not Significant			Not Significant		

Table 10 shows that in D Scale there is no significant difference between the two groups of subjects in the pretest and posttest.

FIGURE 4. Shows the change in Hy Scale in the two groups of subjects.

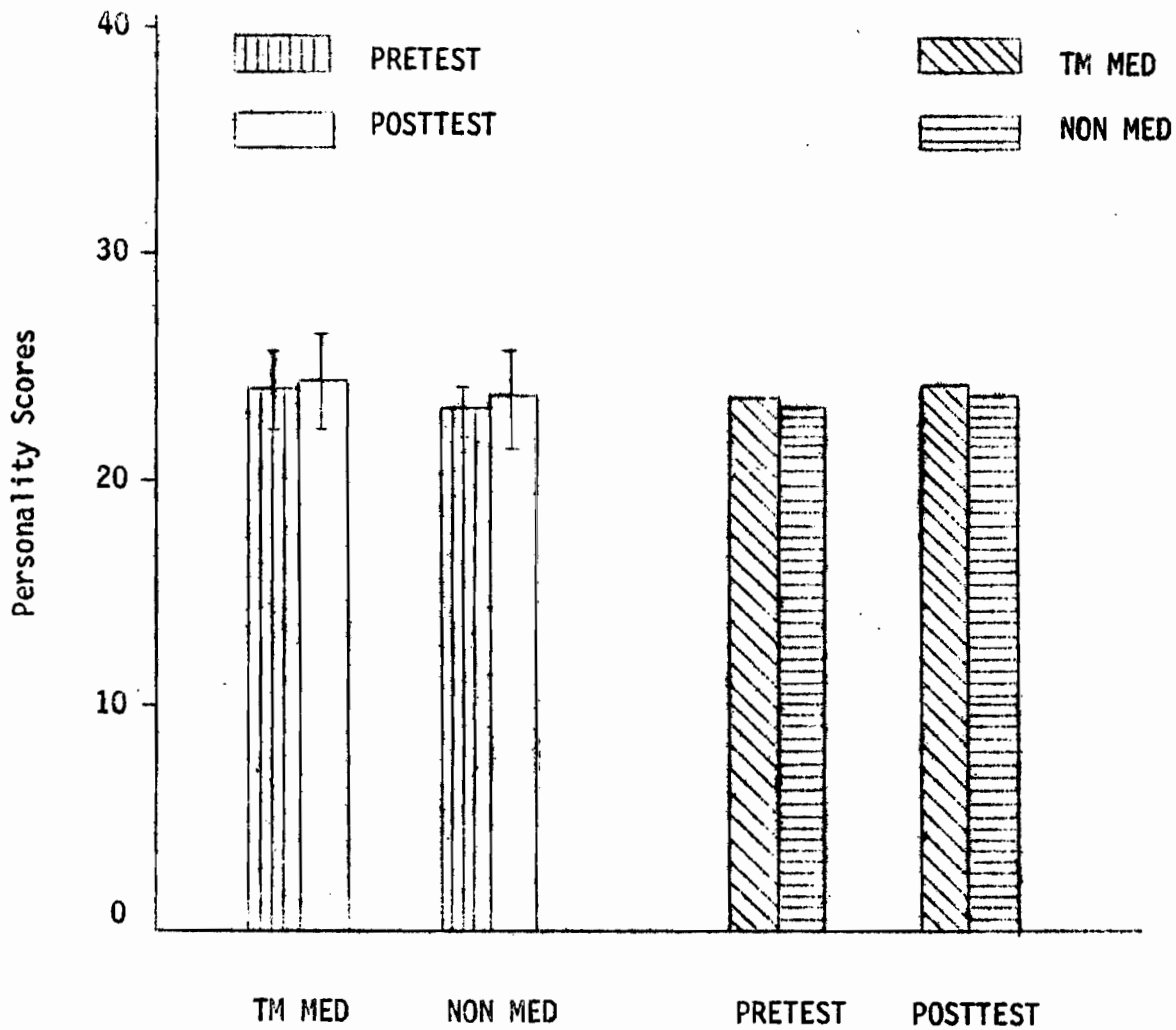


TABLE 11. Shows the change of the mean in Hy Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	23.14	3.86	.1439	23.28	4.23	.0794
Non Meditator	20	22.95	3.69		23.15	5.30	

$t_{.05}(32) = 1.697$

Not Significant

Not Significant

Table 11 shows that there is no significant difference in Hy Scale between the two groups of subjects in the pretest and posttest.

FIGURE 5. Shows the change in Pd Scale in the two groups of subjects.

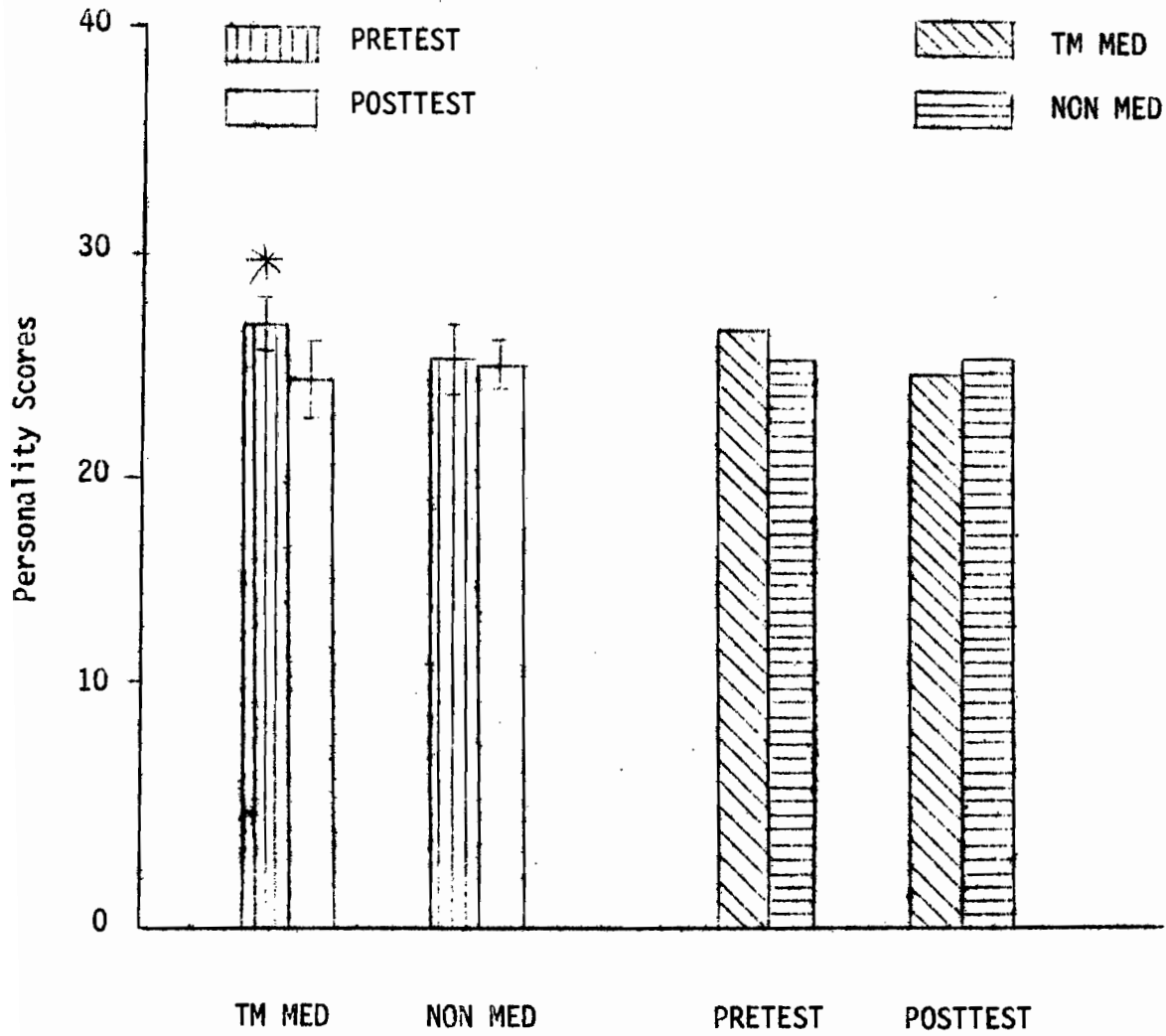


TABLE 12. Shows the change of the mean in Pd Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	27.21	3.14	1.2607	24.42	4.18	.6180
Non Meditator	20	25.45	4.99		25.25	3.34	

$t_{.05}(32) = 1.697$

Not Significant

Not Significant

Table 12 shows that there is no significant difference in Pd Scale between the two groups of subjects.

FIGURE 6. Shows the change in Mf Scale in the two groups of subjects.

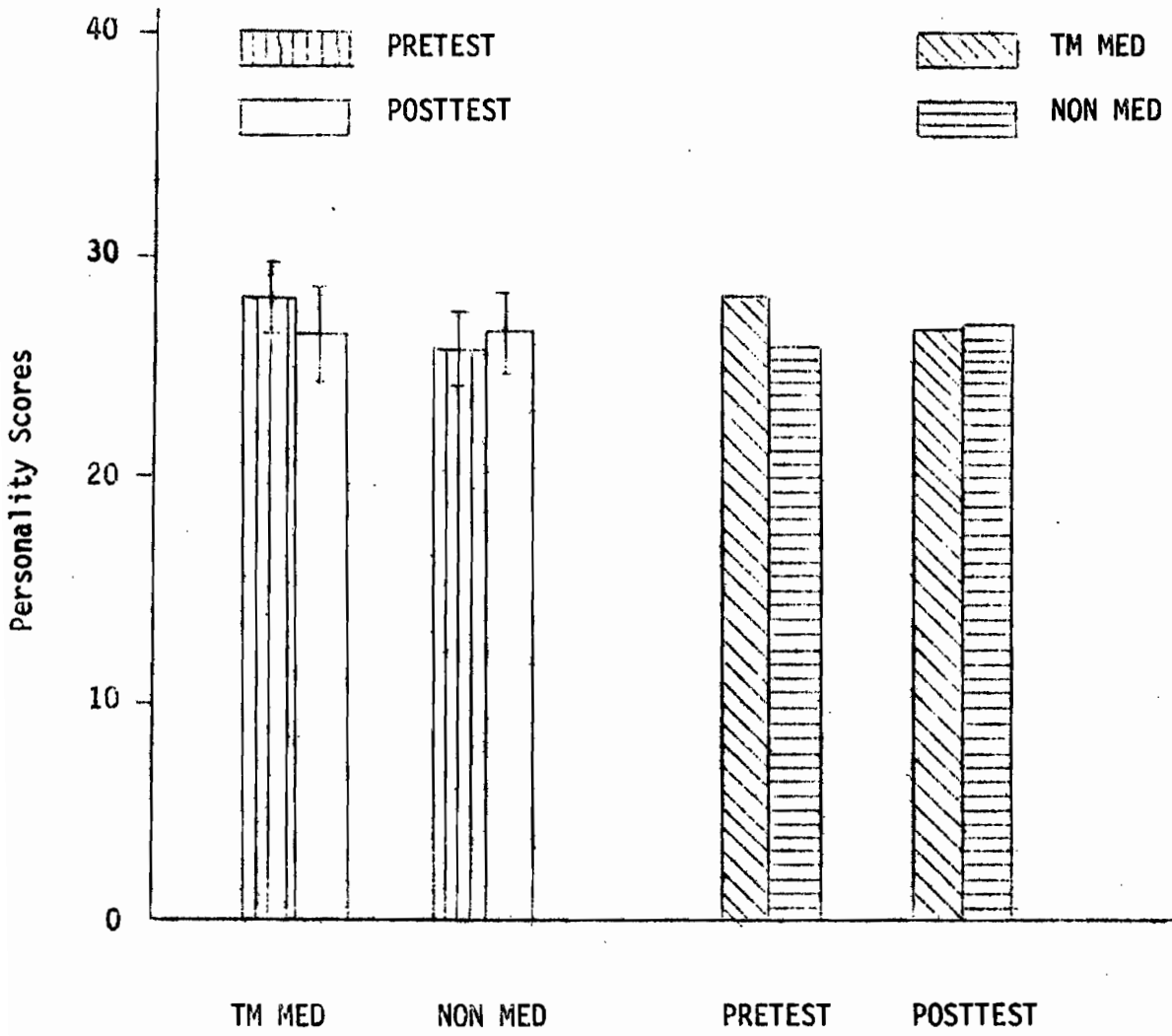


TABLE 13. Shows the change of the mean in Mf Scale of the two groups of subjects in the pretest, and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	28.43	3.88	1.7500*	26.07	4.73	.2491
Non Meditator	20	25.05	3.94		26.45	3.82	

$t_{.05}(32) = 1.697$

Significant at .05 level

Not Significant

Table 13 shows that there is a significant difference in Mf Scale between the two groups in Mf Scale in the pretest, and after three months there is no significant difference between the two groups.

FIGURE 7. Shows the change in Pa Scale in the two groups of subjects.

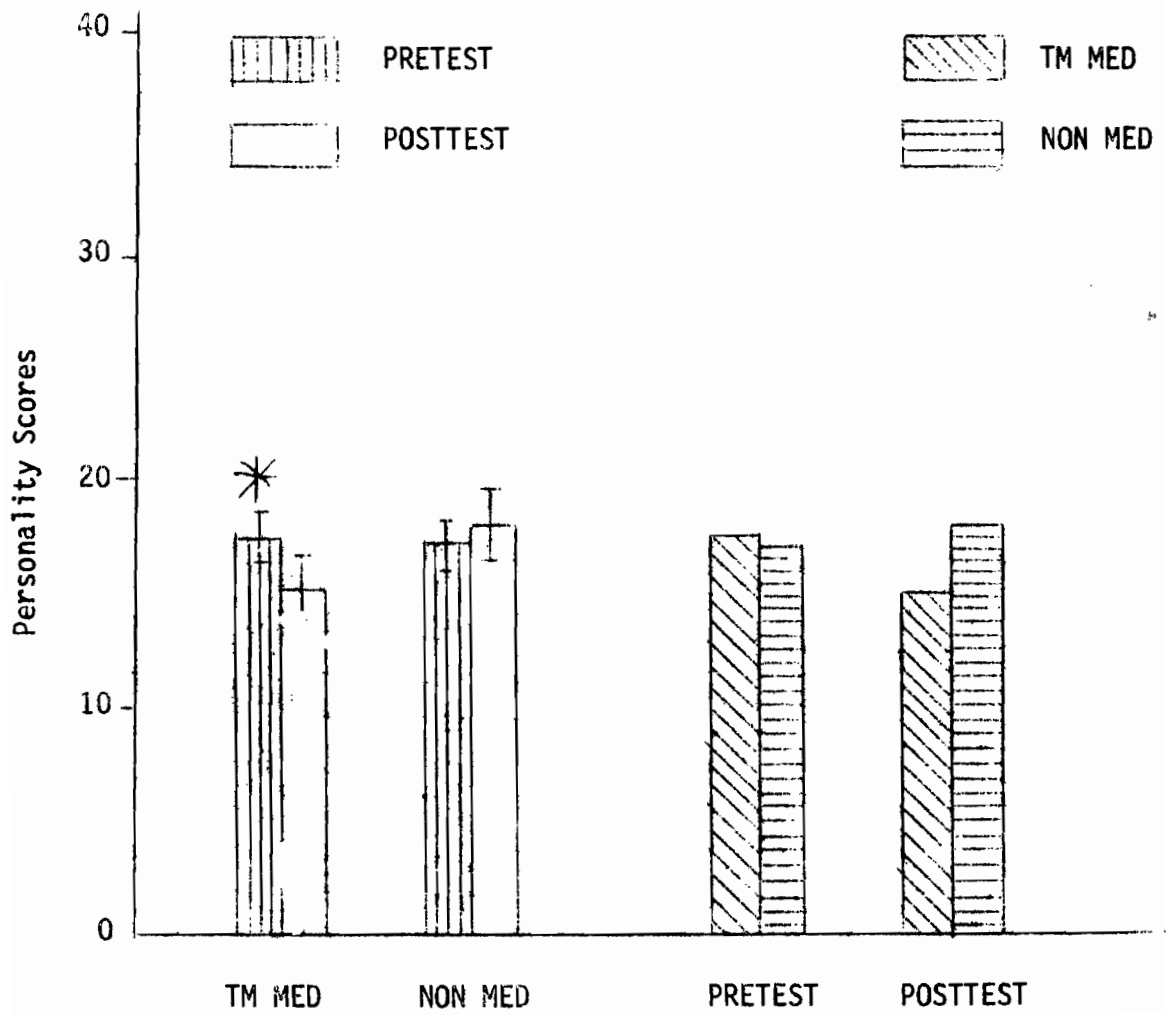


TABLE 14. Shows the change of the mean in Pa Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	18.07	2.87	.1153	15.57	3.37	2.1471*
Non Meditator	20	17.95	3.25		18.40	4.31	

$t_{.05}(32) = 1.697$

Not Significant

*Significant at .05 level

Table 14 shows that there is no significant difference in Pa Scale between the two groups in the pretest and in the posttest there is a significant difference in the two groups at .05 level.

FIGURE 8. Shows the change in Pt Scale in the two groups of subjects.

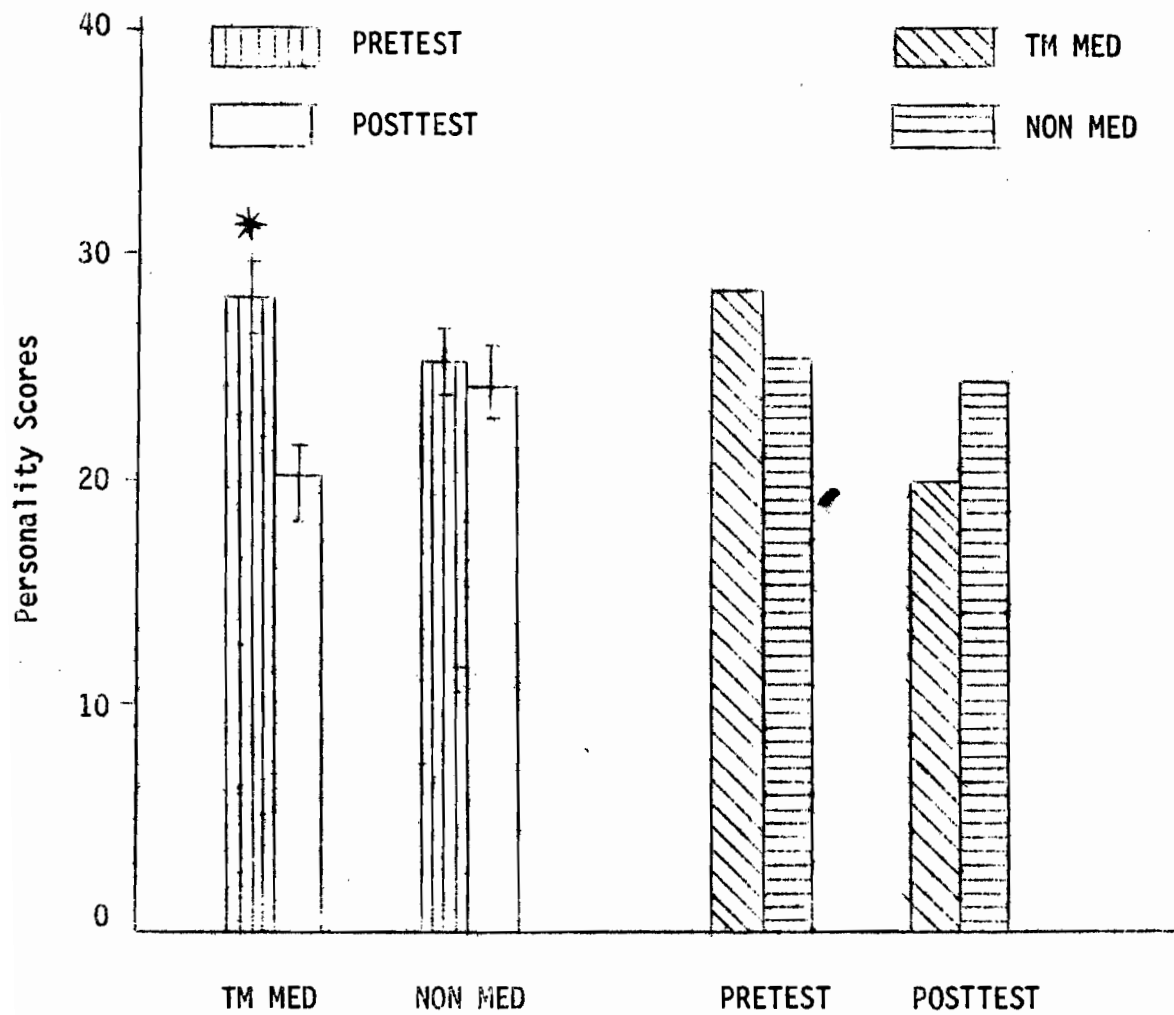


TABLE 15. Shows the change of the mean in Pt Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	28.21	5.37	1.3882	20.35	6.02	1.3506
Non Meditator	20	25.60	5.51		23.15	5.85	

$t_{.05}(32) = 1.697$ Not Significant Not Significant

Table 15 shows that there is no significant difference in the two groups of subjects in Pt Scale both in the pretest and in the posttest.

FIGURE 9. Shows the change in Sc Scale in the two groups of subjects.

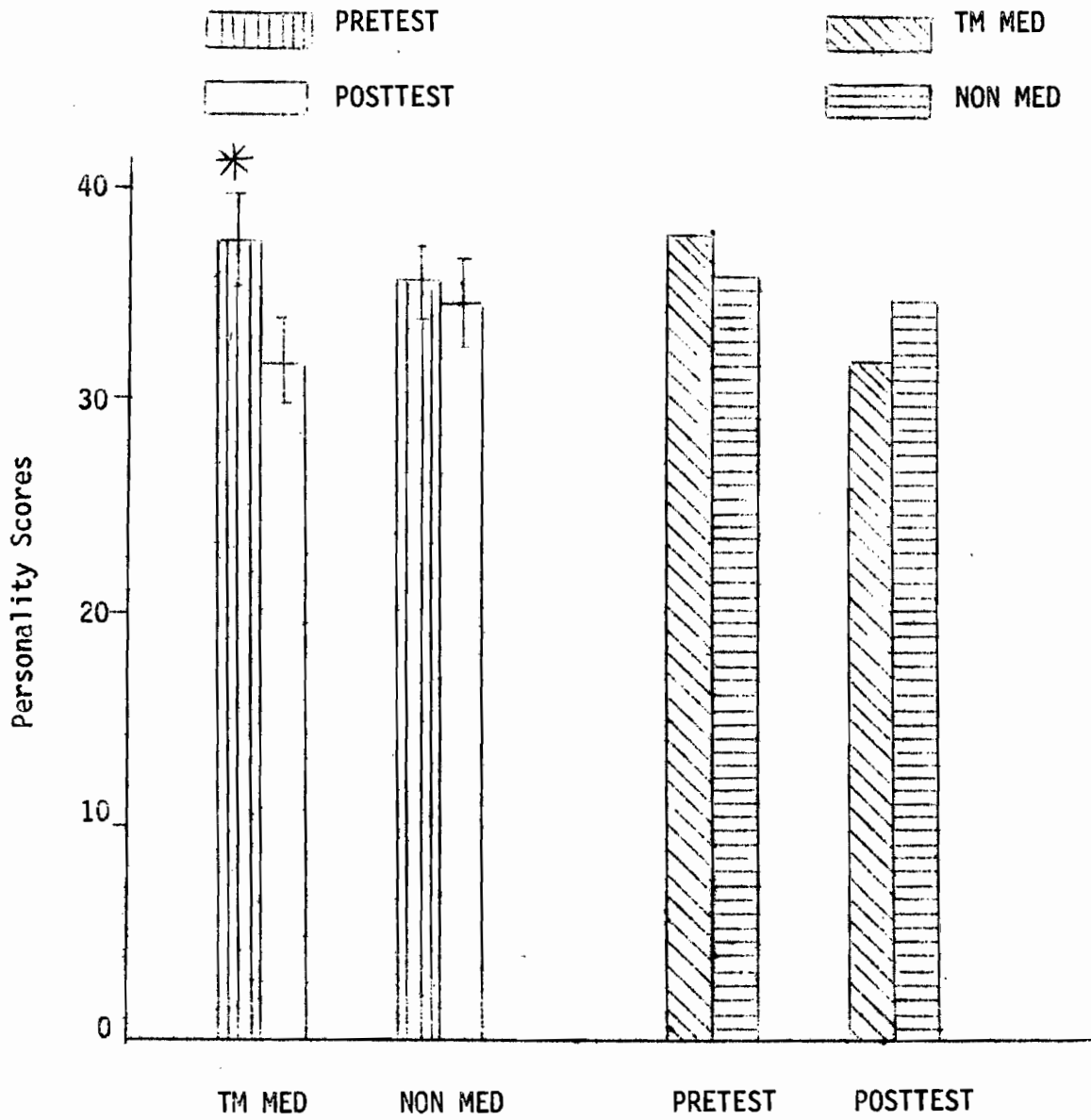


TABLE 16. Shows the change of the mean in Sc Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	37.73	7.22	.6296	31.28	8.00	1.3527
Non Meditator	20	36.25	6.68		34.90	7.20	

$t_{.05}(32) = 1.697$

Not Significant

Not Significant

Table 16 shows that there is no significant difference between the two groups of subjects in Sc Scale both in the pretest and in the posttest.

FIGURE 10. Shows the change in Ma Scale in the two groups of subjects.

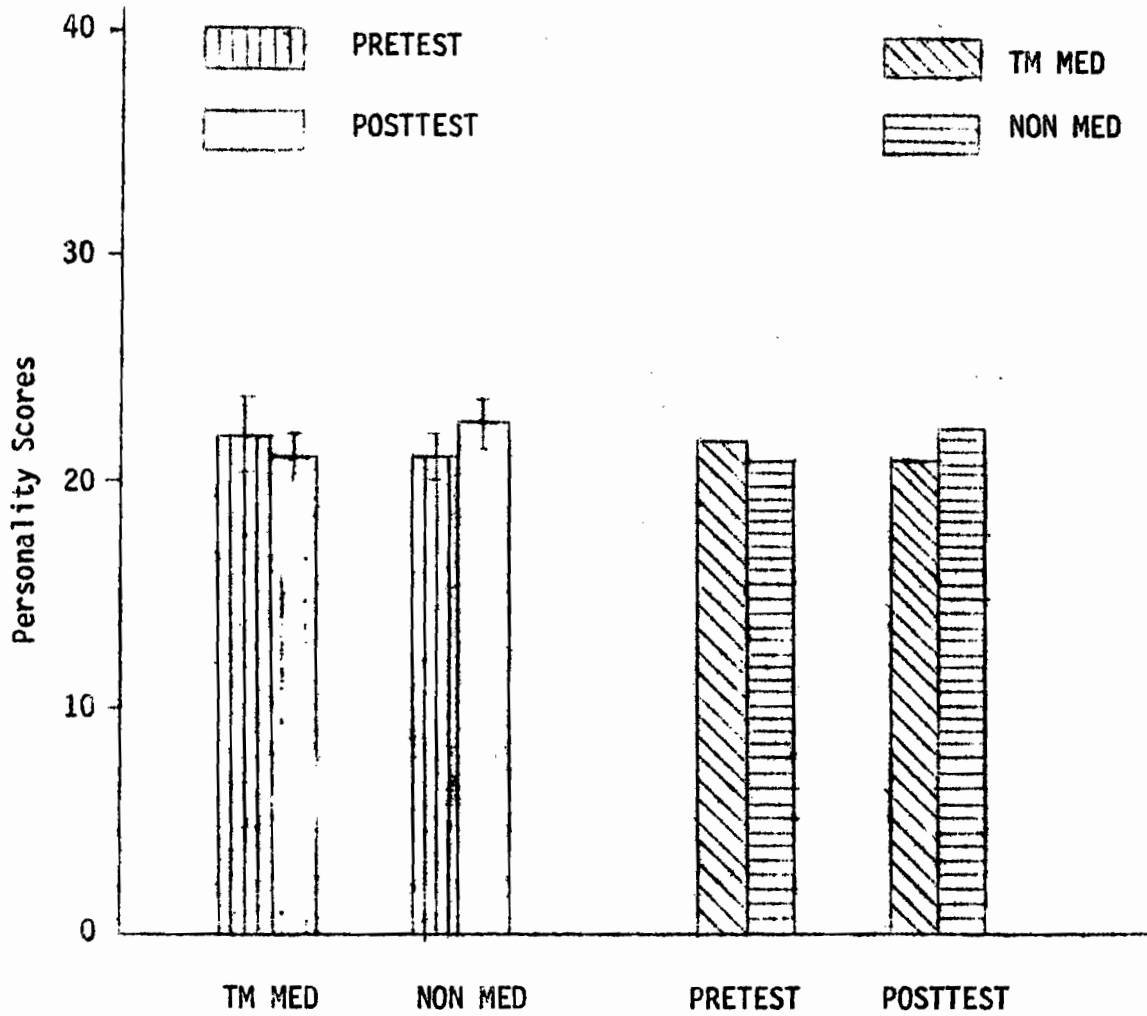


TABLE 17. Shows the change of the mean in Ma Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	22.14	5.65	.5235	21.28	4.73	.9614
Non Meditator	20	21.25	3.52		22.70	3.42	

$t_{.05}(32) = 1.697$ Not Significant Not Significant

Table 17 shows that there is no significant difference in the two groups of subjects in Ma Scale in the pretest and in the posttest.

FIGURE 11. Shows the change in Si Scale in the two groups of subjects.

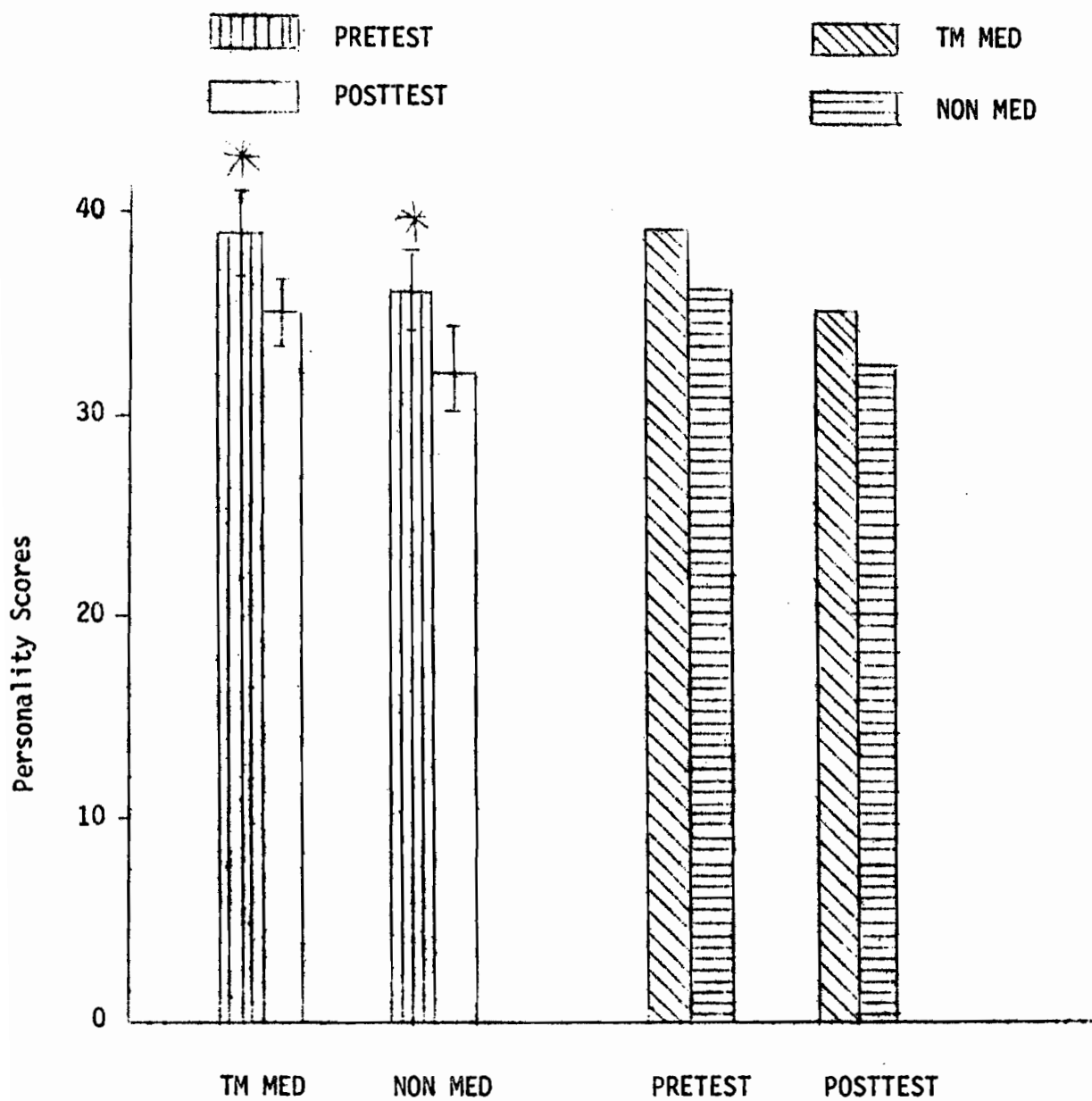


TABLE 18. Shows the change of the mean in Si Scale of the two groups of subjects in the pretest and posttest.

Groups	N	Pretest			Posttest		
		\bar{X}	S.D.	t	\bar{X}	S.D.	t
TM Meditator	14	38.86	5.40	1.4734	34.64	4.32	1.2170
Non Meditator	20	36.10	5.34		32.70	4.92	
$t_{.05}(32) = 1.697$		Not Significant			Not Significant		

From the table shows that there is no significant difference in Si Scale between the two groups both in the pretest and posttest.

TABLE 19. Shows t-dependent values of the two groups after three months.

Scales	TM Meditator	Non Meditator
Hs	.356	.670
D	1.586	.263
Hy	.082	.159
Pd	2.325*	.165
Mf	1.348	1.239
Pa	2.192*	.549
Pt	3.082*	1.685
Sc	2.138*	.871
Ma	.390	.883
Si	2.089*	2.443*

$$t_{.05}(13) = 1.771$$

$$t_{.05}(19) = 1.729$$

* Significant at .05 level

TABLE 20. The table shows that in Hs Scale there is no significant difference in TM Meditator after practicing TM.

TABLE 21. The table shows that in D Scale there is no significant difference in TM Meditator after practicing TM.

TABLE 22. The table shows that in Hy Scale there is no significant difference in TM Meditator after practicing TM.

TABLE 20. Shows the change in the means in Hs Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	11.86	2.66	0.356
Posttest	14	10.57	2.47	

$$t_{.05}(13) = 1.771$$

Not Significant

TABLE 21. Shows the change in the means in D Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	27.57	5.62	1.586
Posttest	14	25.00	2.77	

$$t_{.05}(13) = 1.771$$

Not Significant

TALBE 22. Shows the change in the means in Hy Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	23.14	3.86	0.082
Posttest	14	23.28	4.23	

$$t_{.05}(13) = 1.771$$

Not Significant

TABLE 23. The table shows that in Pd Scale there is a significant difference in TM Meditator at .05 level after practicing TM.

TABLE 24. The table shows that in Mf Scale there is no significant difference in TM Meditator after practicing TM.

TABLE 25. The table shows that in Pa Scale there is a significant difference in TM Meditator after practicing TM at .05 level.

TABLE 23. Shows the change in the means in Pd Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	27.21	3.14	2.325*
Posttest	14	24.42	4.18	

$t_{.05}(13) = 1.771$

*Significant at level .05

TABLE 24. Shows the change in the means in Mf Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	28.43	3.88	1.348
Posttest	14	26.07	4.73	

$t_{.05}(13) = 1.771$

Not Significant

TABLE 25. Shows the change in the means in Pa Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	18.07	2.87	2.192*
Posttest	14	15.57	3.37	

$t_{.05}(13) = 1.771$

* Significant at level .05

TABLE 26. The table shows that in Pt Scale there is a significant difference in TM Meditator after practicing TM.

TABLE 27. The table shows that in Sc Scale there is a significant difference in TM Meditator after practicing TM.

TABLE 28. The table shows that in Ma Scale there is no significant difference after practicing TM in TM Meditator.

TABLE 26. Shows the change in the means in Pt Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	28.21	5.37	3.082*
Posttest	14	20.35	6.02	

$$t_{.05}(13) = 1.771$$

*Significant at level .05

TABLE 27. Shows the change in the means in Sc Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	37.78	7.22	2.138*
Posttest	14	31.28	8.00	

$$t_{.05}(13) = 1.771$$

*Significant at level .05

TABLE 28. Shows the change in the means in Ma Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	22.14	5.65	0.390
Posttest	14	21.28	4.73	

$$t_{.05}(13) = 1.771$$

Not Significant

TABLE 29. Shows the change in the means in Si Scale of TM Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	14	38.86	5.40	2.089*
Posttest	14	34.64	4.32	

$t_{.05}(13) = 1.771$

*Significant at level .05

Table 29 shows that there is a significant difference in Si Scale in TM Meditator after practicing TM.

TABLE 30. The table shows that in Hs Scale of Non Meditator there is no significant difference after three months.

TABLE 31. The table shows that in D Scale of Non Meditator there is no significant difference after three months.

TABLE 32. The table shows that in Hy Scale of Non Meditator there is no significant difference after three months.

TABLE 30. Shows the change in the means in Hs Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	11.00	3.43	.670
Posttest	20	10.20	4.05	

$t_{.05}(19) = 1.729$

Not Significant

TABLE 31. Shows the change in the means in D Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	25.80	4.89	.263
Posttest	20	26.10	4.33	

$t_{.05}(19) = 1.729$

Not Significant

TABLE 32. Shows the change in the means in Hy Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	22.95	3.69	.159
Posttest	20	23.15	5.30	

$t_{.05}(19) = 1.729$

Not Significant

TABLE 33. The table shows that in Pd Scale of Non Meditator there is no significant difference after three months.

TABLE 34. The table shows that in Mf Scale of Non Meditator there is no significant difference after three months.

TABLE 35. The table shows that in Pa Scale of Non Meditator there is no significant difference after three months.

TABLE 33. Shows the change in the means in Pd Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	25.45	4.99	.165
Posttest	20	25.25	3.34	

$t_{.05}(19) = 1.729$

Not Significant

TABLE 34. Shows the change in the means in Mf Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	25.05	3.94	1.239
Posttest	20	26.45	3.82	

$t_{.05}(19) = 1.729$

Not Significant

TABLE 35. Shows the change in the means in Pa Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	17.95	3.25	.549
Posttest	20	18.40	4.31	

$t_{.05}(19) = 1.729$

Not Significant

TABLE 36. The table shows that in Pt Scale of Non Meditator there is no significant difference after three months.

TABLE 37. The table shows that in Sc Scale of Non Meditator there is no significant difference after three months.

TABLE 38. The table shows that in Ma Scale of Non Meditator there is no significant difference after three months.

TABLE 36. Shows the change in the means in Pt Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	25.60	5.51	1.685
Posttest	20	23.15	5.85	
$t_{.05}(19) = 1.729$				Not Significant

TABLE 37. Shows the change in the means in Sc Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	36.25	6.68	.871
Posttest	20	34.90	7.20	
$t_{.05}(19) = 1.729$				Not Significant

TABLE 38. Shows the change in the means in Ma Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	21.25	3.52	.883
Posttest	20	22.70	3.42	
$t_{.05}(19) = 1.729$				Not Significant

TABLE 39. Shows the change in the means in Si Scale of Non Meditator.

Time	N	\bar{X}	S.D.	t
Pretest	20	36.10	5.34	2.443*
Posttest	20	32.70	4.92	

$t_{.05}(19) = 1.729$

*Significant at .05 level

Table 39 shows that in Si Scale there is a significant difference in Non Meditator at .05 level after three months.

TABLE 40. Shows the values of the MEANS and the S.D. of the two groups of subjects.

Scales		TM Meditator				Non Meditator			
		Pretest		Posttest		Pretest		Posttest	
		\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.
Hs	33	11.86	2.66	10.57	2.47	11.00	3.43	10.20	4.05
D	60	27.57	5.62	25.00	2.77	25.80	4.89	26.10	4.33
Hy	60	23.14	3.86	23.28	4.23	22.95	3.69	23.15	5.30
Pd	50	27.21	3.14	24.42	4.18	25.45	4.99	25.25	3.34
Mf	60	28.43	3.88	26.07	4.73	25.05	3.94	26.45	3.82
Pa	40	18.07	2.87	15.57	3.37	17.95	3.25	18.40	4.31
Pt	48	28.21	5.37	20.35	6.02	25.60	5.51	23.15	5.85
Sc	78	37.78	7.22	31.28	8.00	36.25	6.68	34.90	7.20
Ma	46	22.14	5.65	21.28	4.73	21.25	3.52	22.70	3.42
Si	70	38.86	5.40	34.64	4.32	36.10	5.34	32.70	4.92

CHAPTER 5

SUMMARY & DISCUSSION

PURPOSE OF THE STUDY

1. To investigate the effect of the TM program on some characteristics of Thai juvenile offenders in the Central Observation and Protection Center.
2. To compare the effect of the TM program on some characteristics between TM meditators and nonmeditators for the experimental period of 12 weeks.
3. To compare some characteristics and the period of time before and after meditation.

SUBJECTS

The 34 juvenile offenders from the training school of the Central Observation and Protection Center, Central Juvenile Court, volunteered to participate in this study. They are divided in two groups: the experimental group and the nonmeditator control group. Each group consisted of 14 and 20 offenders, with age between 14-19 years.

TEST INSTRUMENTS

The Minnesota Multiphasic Personality Inventory (MMPI) was applied in 10 clinical scales : Hs, D, Hy, Pd, Mf, Pa, Pt, Sc, Ma & Si.

EXPERIMENTAL DESIGN

All subjects took the pretest prior to starting the TM program in the experimental group and after three months interval they were given the posttest again.

STATISTICAL ANALYSIS OF DATA

1. t-test (independent) was used to compare the difference between

means of the two groups of subjects in the pretest and the posttest.

2. t-test (dependent) was used to compare the difference between means in each group of subjects in the pretest and the posttest.

RESULTS The results from the personality test (MMPI) shows that :

1. Comparing the pretest and posttest between the two groups (TM meditators and nonmeditators), there was only one scale (Mf Scale) which differed significantly at the pretest. TM meditator has the means which is significantly higher than nonmeditator at .05 level ($t = 1.750, 1.697 P < .05$). After three months, there were 2 scales which showed significant changes in the TM group : Mf scale and Pa scale. However, the Mf scale showed no significant difference after practicing TM between the two groups and the Pa scale showed the significant change of the means between the two groups at .05 level ($t = 2.1471, 1.697 P < .05$). The TM group showed the means which were significantly lower than the nonmeditator group in this scale after practicing TM. In the scale Pt, Sc & Si, there were some trends of improvement in the TM meditator group, however, the results do not show statistical significance.

2. Comparing the pretest and the posttest in each group of subjects, the TM group showed that there were 5 scales in which the posttest personality scores significantly lower than the pretest after practicing the TM for the period of three months :- Pd, Pa, Pt, Sc & Si. There were also some trends of change in D scale & Mf scale. In nonmeditator group, there was only one scale which showed significant change (Si), the mean of the posttest was significantly lower than the pretest at .05 level ($t = 2.443, 1.729 P < .05$).

Discussion

The findings made in the present study clearly indicate that the three months practice of the Transcendental Meditation program produced significant changes in the personality of the juvenile offenders as measured by the MMPI. In general, the MMPI scores of the regular meditator group showed more consistent improvement as compare to the non-meditator control group. When the posttest scores of the regular meditator group were compared with the non-meditator control group according to the proposed hypothesis I, the regular meditator group showed significant decreases in the score of the Mf and Pa scales.

When the posttest scores were compared with the pretest scores in the regular meditator group according to the proposed hypothesis II, there were significant improvements in the Pd, Pa, Pt, Sc and Si scales. In the non-meditator control group, only the scores of the Si scale showed significant changes. Therefore, it is clearly shown from the present experimental evidence that the juvenile offenders who regularly practised the TM program during the three months period showed more corrective improvement in their personality than the control group. The decrease in the Mf score indicates on improvement in the tendency toward more masculinity among the male juvenile offenders who meditated regularly. The findings also indicate an improvement toward the maturation of interest and better attitude toward their own sex. Similar findings have been reported in a study by Penner et al (1974) with the Omnibus Personality Inventory (OPI) scale.

The significant reduction of the scores in the Paranoid scale (Pa) indicate that the subjects who meditate regularly showed better

improvement in the paranoid tendencies. In general, this finding suggest that the experimental subjects become less paranoid; less susceptible to fear, suspiciousness and delusion of persecution. They also become more flexible and confident in their relationships toward others. The findings in these respects are consistent with those reported in study of Van den Berg (1973) by the Netherlands Personality Inventory which showed significant improvements in the relationships and confidence toward others. Similar tendency was also noted in another study by Orme-Johnson (1972) with the MMPI scale.

As pointed out by these previous investigators, there were also several limitation in conducting such an experiment. First, the limitation of the availability of the subjects. In practice, it is difficult to provide a matched pairing between the experimental and control subjects due to the small number of the available experimental and control subjects. Furthermore, the MMPI scales include 10 different dimensions of personality variables, and thus made it difficult to match all the different dimensions. However, fortunately in this experiment, the pretest scores between the designated experimental and controls groups, showed no significant differences in 9 scales of the total 10 MMPI scales. Only in the *Mf* scale was there a significant difference between the experimental and control group in the pretest. Therefore, the only statistically significant scores between the experimental and control groups was in the paranoid scale. Although there is a definite trend of improvement in the scores of other MMPI scales in this experiment, the lack of statistical differences in these scales might be due to other uncontrollable factors influencing

the experiment. As Breckenridge and Vincent had pointed out, the "change or alter" in personality does not necessarily mean that the alteration will be completed or permanent. Furthermore, the changes of personality is a part of the developmental and maturational processes which occur more frequently in children than adolescents and adults (Hurlock, 1964). Therefore, the differences in the MMPI scores indicate not only the effect of the TM program introduced to the experimental group, but can also be the results of relative changes in developmental and maturational processes. However, when data obtained before and after the TM program were compared between the experimental and control groups the significant difference in the Posttest scores of the Pa scale must be due to the beneficial effect of the Transcendental Meditation Program. The finding was also confirmed when it was found that the posttest scores of the Pa scale were also significantly lower than the pretest score among the experimental subjects. The findings that certain, but not all scales are significantly affected by the TM program in the experimental subjects strongly suggested that the effects of the TM program are selective toward improvement of certain personality variables. These findings are also consistent with previous studies by Orme-Johnson et al (1971, 1972), J.P. Child (1973) and Bloomfield (1975). The development of significant changes in certain beneficial effects of the TM program may also be dependent on the duration of the regular practicing. Hence, certain variables may not show significant changes during short period of practicing the TM program. In a longitudinal study by Fehr (1974 in Orme-Johnson and Farrow, 1974), the results obtained from the administration of the Freiburger Personality Inventory to a group of 37

subjects three times indicated that the regular meditators showed significantly greater emotional stability and greater sociability than the norm. Furthermore, the changes in various scales among the three tests suggested that regulative-compensatory processes producing a reduction in neuroticism dominate in the first few weeks of the practice of the TM programme, and the growth of individual creativity and integration continue throughout the rest of the first year.

Then the pretest scores of the meditator group were compared with the posttest scores there were significant improvement in the scales of Psychopathic deviate (Pd) and schizophrenia (Sc). As pointed out by Hathaway and Monachesi (1963), these two scales are very important in the personality characteristics in delinquency. The significant reduction in the Pd scale can be interpreted as the reduction in the disregard of rules in delinquency. The reduction in the schizophrenic scale, on the other hand, indicates the reduction in the internal conflict and confusion, and in the normal person, it can also indicate a reduction in the negative and odd behaviours. The same finding on the Sc scale was also noted by Orme-Johnson (1972) among the subjects who used non-prescribed drugs and drug addicts. In another study by Seeman et al (1972) using the Shostrom's Personality Orientation Inventory (POI), the transcendental meditator group scored significantly better than the control group on the acceptance of aggression and capacity for intimate contact. With the Freiburger Personality Inventory (FPI), Ferh and Torber, (1972) found that the experimental meditator group showed significant reduction in the tendency to dominate others.

In two separate studies (Orme-Johnson, 1972 and Van Den Berg & Mulder, 1973), it was suggested that the improvement in the Pa scale might also reduce behavioural rigidity and anxiety, therefore, produced an improvement in the personal relationship with others. In another study by Penner et al (1974) there were also improvements on the scales of depression (D) and masculine/feminine interest (Mf). In 1975, Bloomfield reported significant improvements in the MMPI scores of an adolescent who had a history of obsessive compulsive neurosis after 14 months of Transcendental Meditation program.

Many investigators in this field concluded that the beneficial effects of the TM program evolved from the personality improvement which has the bases in the reduction of fear and anxiety, and improvement toward self-actualization (Seeman et al, 1972; Nidich et al, 1972; Davies, 1974; Shector, 1975). The conclusion was consistent with Freudian's concept that reduction in anxiety would reduce conflict between id, ego and superego. The TM program has also been shown to improve moral reasoning (Nidich, 1975; Mongkolrat, 1981)., prevent alcohol abuse (Shafii et al, 1975) and non-prescribed drug abuse (Benson and Wallace, 1972). Therefore, the transcendental meditation program can be a potential adjuvant to the rehabilitation program for adolescent delinquency, criminal prisoners and general cases of behavioural inadequacy. Further research in this area may be beneficial in providing more information on the psychophysiological mechanisms of the Meditation process which are unique to the Transcendental Meditation and other Meditation Program, and their beneficial effects in mental, behavioural and social improvements for mankind.

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