

MEDITATION AS A MEANS OF ACTUALIZING THE RELIGIOUS PERSONALITY IDEAL:

A REVIEW OF EMPIRICAL RESEARCH FROM THE PERSPECTIVE OF KAZIMIERZ

DABROWSKI'S THEORY OF POSITIVE DISINTEGRATION

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ABSTRACT

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The practice of meditation has been increasingly a subject for psychological research over the past several years. The purpose of this study is to review and interpret some of the major findings of this research in terms of two organizational principles. The first is that of relating the research results to scholarly descriptions of the religious personality ideal, in order to show: (1) that the temperamental disposition characteristic of those who express an interest in, and who succeed at, the practice of meditation, is qualitatively similar to, though quantitatively different from, the temperamental disposition of the religious ideal; and (2) that the practice of meditation promotes growth, along several identifiable dimensions of personality, in the direction of this ideal.

The second organizing principle is Kazimierz Dabrowski's theory of positive disintegration. This model relates the distinctive structures of five personality levels to what are identified as elements of developmental potential. Since the prerequisite temperament for meditation fits the theory's concept of developmental potential and since a psychological interpretation of the religious personality ideal appears to be identical to Dabrowski's final personality level, the theory of positive disintegration provides a means of integrating two types of research results --

i.e., those regarding temperamental prerequisites for meditation and those regarding the effects of meditation on personality change. In addition, an attempt to describe the function of meditation in terms of Daigrowski's theory provides hypotheses for further research.

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CHAPTER I

INTRODUCTION

PURPOSE

Throughout the course of the sixties and seventies an ever-increasing number of people both outside and inside the major religious denominations have become interested in the practice of meditation. One purpose of this study is to show, on the basis of results from experimental research, that interest in, and success at, meditation presupposes a temperament similar in kind, though different in degree, to that of religious personality ideals, variously referred to as saints, sages, mystics, bodhisattvas, arahants, etc. Although this common temperament, or disposition, is frequently described in terms of psychopathology, in Kazimierz Dabrowski's model of personality development, it is characterized as heightened psychic sensitivity or overexcitability, an essential requirement for personality growth:

The second goal of the study is to show, again by a review of experimental research, that when the religious ideal is interpreted in terms of developmental psychology, meditation effects a change in the personality of the meditator in the direction of that religious ideal.

It may well be the case, as is suggested in a study of the Nichiren Shoshu organization (Hurst, 1980:314), that those who join new religious movements (including meditation groups), are reacting to the "confusing multiplicity of choices that confront an individual in a highly

technologically differentiated society." But the fact is that some react more than others. From the point of view of the technologically differentiated society the overreactors can be understood as purely and simply lacking the capacity to adapt. However, from the perspective of Dabrowski's developmental theory such individuals are frequently in possession of an above average potential for personality growth.

It may also be true, as Hurst (1980:315-316) implies, that by joining a new religious movement, the individual can overcome his or her anxiety and confusion by uncritically internalizing a package of coherent values that direct choices and endow everyday activities with ultimate significance. However, empirical studies indicate that in meditation groups it is not simply a matter of a new identity derived from rigid adherence to group norms. By practicing meditation the individual undergoes a transformation of personality that tends in the direction of a higher level of development. That is to say, the individual becomes more integrated, spontaneous, flexible, empathic and more open to both internal and external experience. He or she also becomes less subject to social pressure and biological impulses.

DEFINITION OF MEDITATION

Meditation is an internally motivated practice of mental concentration. It can be contrasted, not only with the uncontrolled condition of the mind, in which there is a random flow of thoughts, but also with those types of concentration that are motivated by immediate external circumstances -- e.g., as is the case when crossing a busy street. Meditation may also be contrasted with disciplined activity such as study, without denying that the latter frequently involves a type of reflection

that is indistinguishable from the former. In study one attempts to accomplish a specific and concrete task, and recourse to meditative reflection is undertaken in the spirit of "reculer pour mieux sauter." In meditation proper, the task is to become more centred for its own sake, by withdrawing attention away from outward activity and from the internally experienced stream of consciousness.

Historically, meditation has been practised within the context of religious traditions and various traditions have distinguished between different types. For example, in Christian mystical writings discursive meditation is contrasted to acquired contemplation. The former, practised by beginners, allows a greater measure of devotional reflection than the latter. However, both, though in varying degrees, require that attention be focused on an object of religion. In all schools of Buddhism a distinction is made between insight meditation (vipasyana) and concentrative meditation (samatha). As its name suggests, the purpose of insight meditation is to gain insight into Buddhist teachings. In order to do so, however, one must make use of one's previously acquired ability to concentrate. On the other hand, insights can arise spontaneously in the practice of concentration alone. Thus, while distinguishable in theory, the two forms of meditation are not so easily separated in practice.

Whatever the distinctions made within religions (or for that matter, between religions), meditation always involves withdrawal of attention from external activities and the normal stream of consciousness, in order to focus on a specific image, sound, thought, bodily function, and so forth. In most of the research reviewed in this study, the focus of attention is either mantra recitation (e.g., Transcendental Meditation)

or breathing (e.g., zazen).

METHOD

The model of personality development

The basic approach used in this study is that of reviewing empirical meditation research reports in terms of Kazimierz Dabrowski's theory of personality growth. Theories of personality development are of two kinds: maturation models and growth, or transformation, models. The former can be further divided into those that describe stages in development from infancy to adulthood (e.g., Piaget's cognitive model) and those that describe stages covering the entire life-span (e.g., Erikson's stages of psychosocial development). In both types of theories passage through the various stages is considered virtually inevitable since it is a function of biological maturation and social expectations. On the other hand, in growth models only the earlier stages are seen as inevitable — the later stages are not. And usually it is considered that the last stage is attained by very few. Examples of growth models are Jung's process of individuation, Loevinger's stages of ego development, Fowler's stages of faith development and Dabrowski's theory of positive disintegration.

Dabrowski's theory was chosen because it meets a number of criteria:

- (1) inclusion of those ultimate transformations of personality referred to in religious traditions as enlightenment, union with God, etc.;
- (2) developmental process described in terms of underlying structure rather than in terms of a single function (e.g., cognition, self-identity, moral reasoning);
- (3) stages not arbitrarily designated but qualitatively distinguishable;

- (4) universality of stages — i.e., stages not content or culture-bound;
- (5) description of constituent elements of developmental potential;
- (6) explicit place given to traditionally religious concerns and practices such as morality, asceticism, meditation, etc.;
- (7) existence of measures of both developmental level and developmental potential. (Piechowski, 1975; Piechowski, 1979 and Gage, Morse & Piechowski, 1981) thus allowing theoretically derived conclusions to be empirically verified by future research.

None of the other existing growth models meet all of these criteria. For example, some theories (e.g., those of Jung and Maslow) describe a developmental process but lack a clearly specified series of stages. In others (e.g., that of Loewinger) the final stage is not equivalent to the highest level described in most religious traditions. Dabrowski's theory is not restricted to a description of faith, ego or moral development. While recognizing that all these are dimensions of personality that undergo transformation, Dabrowski has sought to identify underlying structures of personality dynamisms as a basis for distinguishing stages. And the function of these dynamisms is described in terms of one single developmental principle: disintegration/reintegration.

Dabrowski's model is not without disadvantages. It is not as well known as several other models and thus its terminology and concepts are unfamiliar. It also shares a serious limitation with most, if not all, developmental theories. Although it possesses useful categories for classifying elements of developmental potential, stages of personality, and even an analysis of the structures of the various stages in terms of personality dynamisms, it does not possess a high degree of explanatory

power. There are only tantalizing hints instead of a detailed account of what mediates progress from one stage to another. Developmental potential is said to rely largely on the presence of what is called psychic over-excitability. And it is suggested that developmental dynamisms emerge as a result of differentiation of overexcitability. But the process of differentiation is not described in any detail.

Still, as noted above, this lack of explanatory power is typical of growth theories in general — a situation due in part to their relatively recent appearance in the field of psychology. So it is a question of half a loaf being better than none. On the other hand, it would be unreasonable to expect a complete explanation in terms of causality unless one assumes that all development is strictly determined by either genetic or environmental factors or both. Dabrowski is convinced that a third and largely unpredictable factor is also involved. While the postulation of such a third factor is a welcome change from the all too prevalent attempt to prematurely reduce human behaviour to either nurture or nature, the usefulness of any psychological theory, including a developmental one, is to some large extent dependent upon its explanatory ability.

The meditation studies

The meditation studies reviewed use a variety of experimental designs. Some are non-statistical summaries of data obtained from questionnaires or through interviews, others are correlational studies and still others make use of a more rigorous pretest-posttest control group design. Throughout the review the design is usually noted and in many cases even briefly described to assist the reader in determining the relative importance of the results reported.

There was more than one meditational technique used in the research experiments reviewed. While in some studies a visualization or open-focus type of meditation was used, in most it was a form of mantra, meditation (usually TM) or concentration on breathing (one of the Zen methods). One might reasonably suspect that the various meditative procedures would have quite different effects on practitioners. For example, Naranjo and Ornstein (1977:195-196) explain the differences in habituation to external stimuli observed in yogis and Zen monks as due to differences in meditation procedure. Normal persons on hearing regularly repeating stimuli (e.g., the ticking of a clock) cease reacting within a very short period of time. They become habituated, and this is clearly indicated on their EEG's. Interestingly, according to one study cited by Naranjo and Ornstein, yogis do not notice such stimuli at all — even when they are first presented. On the other hand, another study showed that Zen monks not only react to such stimuli initially, they never cease to react — i.e., they do not show signs of habituation. However, these findings have been challenged by Becker and Shapiro (1981) since they were unable to replicate them.

In a monumental study of correlations between personality variables, three types of meditation and dimensions of meditative experience, Greenfield (1977) found no difference between the experience of those practicing mantra meditation and of those engaged in a visualization method of meditating. Between these two and an emptying form of meditation (similar to Zen practice) there were differences in eight out of 44 measured variables of meditative experience. For example, while all meditators found the experience intense, fulfilling, affirmative and mediating a sense of openness, those practicing the emptying form found

their experience significantly more so.

However, in addition to the fact that no significant difference was found in the majority of experiential variables measured, the Greenfield study was not designed to determine personality changes. All personality measures were administered in a pretest only. It may well be that different forms of meditation produce some unique experiences, but the critical question is whether or not they produce similar effects on personality factors.

Research by Blanz (1973) on the effect of Zen meditation and mantra yoga on three personality tests, indicates that indeed both forms (the ones most commonly employed in meditation experiments) have very similar results. Blanz administered the Personal Orientation Inventory, the Tennessee Self-Concept Scale, and the Anxiety Level subtest of the Omnibus Personality Inventory both before and after a 10-week treatment period.

While analysis of variance revealed one instance of significance between groups and one instance of significant groups times trials interaction, there were 15 instances of significant change over trials (but not between groups). On the basis of these results and a nonstatistical analysis of daily logs, Blanz concluded that both meditation techniques yield very similar personality changes. Thus it would seem that particularly in the case of the present study, which is meant to be more suggestive than conclusive, it is acceptable to include all relevant research irrespective of the form of meditation employed.

Finally, it should be noted that although the degree and quality of personality transformation is undoubtedly affected by the doctrinal and ritual context of meditation, this problem is beyond the scope of the present inquiry, the concern of which is to review common psychological

effects of meditation, whether the context for the practice be religious, quasi-religious or entirely secular.

The content of the chapters is briefly as follows. After an introduction to the theory of positive disintegration in Chapter II, the third chapter describes the temperamental traits of ideal religious personalities, primarily on the basis of reports found in studies of mysticism and religious biographies. Chapter IV is an attempt, based on a review of empirical research, to demonstrate that meditators have a somewhat similar disposition.

The fifth chapter introduces eleven personality factors derived from descriptions of the ideal of various religious traditions. These factors are also shown to be characteristic of advanced personality development as conceptualized by Dabrowski. In Chapter VI, experimental evidence is presented to the effect that meditation promotes the development of each of the eleven personality factors.

Finally, in the seventh chapter, an attempt is made to indicate the personality level of the average meditator and to suggest a tentative and limited model of the function of meditation in personality growth.

By the very nature of the method used in the present study no firm conclusions can be made. These can only be the fruit of careful empirical research. What this study does attempt is to suggest that future experimentation be guided by an overarching paradigm, specifically a comprehensive theory (whether Dabrowski's or some other) of personality growth. The current piecemeal state of meditation research is badly in need of just such a paradigm.

CHAPTER II

DABROWSKI'S THEORY OF POSITIVE DISINTEGRATION

The theory of positive disintegration identifies five levels of personality development: (1) initial or primitive integration in which emotional, mental and imaginal functions are subordinate to basic drives or impulses; (2) three stages of personality disintegration; and (3) secondary integration characterized by unselfconsciousness and spontaneous responsibility, autonomy and authenticity, all of which flow effortlessly from the "personality ideal." Examples of the latter are the great sages and saints, mahatmas or bodhisattvas found within (and without) the major religious traditions of the world.

Individuals in the two stages of integration (i.e., the first and fifth levels of personality) are free from inner conflict. In both behavior is spontaneous and characterized by a certain "innocence." In both, talk about levels of development makes no sense. Goals, values and striving rather characterize the levels of disintegration — particularly level III, called spontaneous multilevel disintegration.

But behind the surface similarities can be seen important differences. The level I person is spontaneously controlled by his basic biological impulses, whereas in the level V person, biological impulses and drives are spontaneously and effortlessly directed by the fully manifest personality ideal. Another difference is that in the fifth level individual, the various personality dimensions (e.g., intellect, emotion

and imagination) are all well-developed, differentiated, flexible and at the same time interpenetrate each other. In primary integration (level I) these functions, especially the emotional one, are undeveloped, or in the case where, for example, the intellect alone is developed, it is inflexible and isolated from the other personality dimensions. Further, a person in primary integration is indifferent to altruistic concerns. The person in secondary integration, on the other hand, is spontaneously yet dispassionately ready to sacrifice himself for others, even to the point of giving up his life. In interpersonal disputes a level I person's conflict with others will be over self-centred concerns. A level I person comes into conflict with others when the satisfaction of basic drives is frustrated -- a fifth level person, when human ideals are threatened. In conflicts with others the first level individual lacks consideration for others if they are perceived as weaker, and instead tends to humiliate and take advantage of them.

In order to move from primary to secondary integration it is necessary to pass through three levels of disintegration which Dabrowski has called unilevel, spontaneous multilevel and organized multilevel. All three are marked by inner conflict, but in level II (unilevel disintegration) this conflict is between the "multiplicity of wills" (or many selves) that are a result of the socialization process. That is to say, conflict is between internalized expectations of others, as well as between expectations of others and biological urges. In all instances, however, conflict is directly or indirectly between competing drives. Hence the description, unilevel.

Multilevel conflict is made possible with the advent of a hierarchy of values. Here the conflict is between satisfying biological drives and

social pressures on the one hand, or altruistic and transcendental concerns on the other. Initially, multilevel disintegration is spontaneous -- i.e., not planned by the individual. During this phase intrapsychic processes begin more and more to influence and direct behavior. Conflict with the environment is acknowledged and occasions self-evaluation. This is in contrast with the tendency of level II persons to avoid any self-criticism by having recourse to various defense mechanisms such as projection. While the level II person reacts to his inner conflict by conformity or rebellion, the level III person thinks more and more in terms of a need for self-transformation. He can be described as a seeker. Conflict here is between the ideal that "ought to be" and the behavior that "is."

The second phase of multilevel disintegration (level IV) is called organized, because here the individual plans his or her own development. Autonomy from biological drives and social pressures is much stronger as is the intrinsically determined hierarchy of values. Behavior is increasingly integrated and oriented towards self-perfection and the service of others. A tireless effort is made to realize "what ought to be."

FACTORS THAT PROMOTE DEVELOPMENT

Movement from one level of personality to another is a function of one or more of three developmental factors: (1) biological; (2) environmental; and (3) autonomous.

The biological factor

According to Dabrowski and Piechowski (1977:30-36) and Piechowski (1979), this factor consists primarily of what Dabrowski calls over-excitabilities. They are so called because they refer to a tendency noted

particularly in children and adolescents (but also in adults) to overreact to stimulation. Dabrowski has specified five categories of stimuli to which there can be an overreaction: (1) emotional; (2) imaginal; (3) intellectual; (4) sensual; and (5) psychomotor. The presence of the first three, especially emotional overexcitability, is essential for development.

Overexcitabilities are expressed in typical concerns and behaviors. Psychomotor overexcitability can be seen in manifestations of surplus energy, such as animated gestures, taking on self-imposed tasks and participation in strenuous games and sports. Other manifestations are various forms of nervousness, such as impulsive actions, some types of delinquent behavior and nervous habits (e.g., nail biting). Sensory overexcitability expresses itself in heightened experience of sensory pleasures and in the seeking of sensual outlets as a release from inner tensions. Examples of the latter include buying sprees, sexual promiscuity, a need for comfort, narcissism and fondness for jewelry and ornaments. In the absence of imaginal, intellectual, and particularly emotional overexcitability, neither the sensual nor the psychomotor forms of overreaction contribute much to personal growth since they lack a necessary connection with processes of inner psychic transformation. For a purely sensual person, for example, sexuality never becomes the expression of a personal relationship as it would if emotional overexcitability were present.

Intellectual overexcitability is manifested in striving for understanding, probing the unknown, love of truth, intellectual curiosity, preoccupation with theoretical problems, reverence for logic, a sharp sense of observation and independence of thought. Imaginal.

overexcitability is expressed in frequent distractions, daydreaming, use of images and metaphors in conversation, fantasy, animistic thinking and vivid nocturnal dreams. Emotional overexcitability can be inferred from the presence of such things as extremes of feeling, a strong affective memory, shyness, concern with death, various forms of anxiety, feelings of loneliness or great sadness, attachment to animals and fellow humans, concern for others, sensitivity regarding self-image and difficulty in an adjustment to a new environment.

In all cases an overexcitability is indicated to the degree that the response exceeds what normally might be expected. Another characteristic of an overexcitability is the intense absorption of the individual's response, be it emotional, imaginal, intellectual, etc. Overexcitabilities are channels of external and internal stimuli. The broader are these channels, the greater the amount and diversity of information received and consequently the likelihood of tension, conflict and dissonance, the resolution of which requires a more flexible, complex, differentiated and integrated system of information processing. And, in fact, over the course of personality development, the five forms of overexcitability become increasingly differentiated and integrated (Dabrowski & Piechowski, 1977:115 & 118).

The environmental factor

The environmental factor refers to any external aid that facilitates the transition from lower to higher psychic functioning. Three types of aids are mentioned by Dabrowski (1967:150-166) -- i.e., direct stimulation, peaceful conditions and guidance from an advisor, counselor or therapist. In reference to sources of direct stimulation that can be found in libraries, museums, the theatre and scientific institutions, Dabrowski

says:

... At times a book presenting a story of a hero which in its psychological and ideological aspects, makes the nuclear dynamism sensitive to the development of personality may be an important factor in stimulating this development. The same is true of theatre plays and many works of plastic art. A proper scientific, social, or artistic environment which stimulates one to creative work, presence at a discussion, taking part in an excursion in the company of proper people may constitute a positive factor and consequently an auxiliary medium stimulating the personality. (Dabrowski, 1967:150)

Specific examples of artistic and literary stimulation given by Dabrowski include the works of Michelangelo, Van Gogh, Camus, Faulkner, and Gandhi's autobiography.

For those individuals already stimulated, and especially for those experiencing a period of great creative tension, what is needed is an interruption of active stimuli permitting the emergence of inner resources that can order and give meaning to conflicting impressions. External aids conducive to this are isolation, music and tranquil surroundings.

Dabrowski emphasizes the value of an advisor, particularly in the early phases of personality development. But even when autonomous development factors become dominant some help is still needed. However, this is now given at the specific request of the developing personality and it is characterized by greater mutuality. Among the functions an advisor performs are:

- (1) pointing out contradictions in behaviour;
- (2) providing insight into negative and positive personality characteristics;
- (3) strengthening positive qualities, such as responsibility;
- (4) interpreting behaviour from a moral perspective;
- (5) encouraging self-criticism, independence of thought and behaviour, and empathy;

(6) training the individual to struggle against subordination of intelligence to instincts and against egoism;

(7) developing a capacity to organize the interior life, including the formation of a hierarchy of intrinsic values;

(8) teaching the individual to meditate.

The autonomous factor

According to Dabrowski and Piechowski (1977:60 & 62), the autonomous factor is synonymous with the presence of what are called multilevel dynamisms. Dynamisms are compounds of intuitional, intellectual, emotional and volitional elements which together constitute specific dispositions toward the shaping or development of personality. It is these dynamisms that constitute the structure of the individual's inner psychic milieu, which can be non-existent (as in the first level of personality), unilevel (as in the second stage) or multilevel (as in the third, fourth and fifth stages). A multilevel structure, composed of multilevel dynamisms, is one in which there exists an awareness of the direction of development, i.e., from the "lower" to the "higher," from the simple to the complex, from the automatic to the voluntary and from the rigid to the flexible. A unilevel structure, on the other hand, is one in which no developmental direction can be discerned.

Dabrowski and Piechowski (1970:65-81) divide multilevel dynamisms into three groups: (1) those that are characterized by spontaneity and a lack of definite organization (found in level III); (2) those that organize and shape the process of positive disintegration (found in level IV); and (3) those that promote secondary integration (found in level V). From the perspective of the development of personality from primary integration through the phases of disintegration toward secondary

integration, the function of the biological and environmental factors is to facilitate the emergence of the autonomous factor.

DEVELOPMENTAL DYNAMISMS

With the exception of primary integration, each level of personality contains a set of psychic dynamisms which promote development (see Dabrowski and Piechowski, 1977:37-56). In primary integration development is chiefly a function of the biological factor and to a lesser extent of environmental conditions. While the dynamisms of the highest levels are expressions of the autonomous factor, in unilevel disintegration (level II) the dynamisms present are either a product of overexcitability (the biological factor) or of susceptibility to the socialization process (the environmental factor).

Dabrowski has identified three main dynamisms as characterizing unilevel disintegration. They are ambivalences (or fluctuations of mood), ambitendencies (desire for two irreconcilable things at the same time) and the second factor (susceptibility to social opinion grounded in feelings of inferiority with respect to others).

The structure of spontaneous multilevel disintegration is composed of hierarchization, or the critical perception and assessment of experiences, behaviour and attitudes in terms of higher and lower values, empathy and a set of self-critical dynamisms, such as guilt, shame, astonishment and disquietude with oneself. There is also a sense of inferiority toward what one "ought to be" and a refusal to adjust or conform to inauthentic values, which refusal Dabrowski calls positive maladjustment.

Organized, multilevel disintegration is characterized by dynamisms

which reflect an increasing capacity of the individual to direct his or her own developmental process. There is subject-object in oneself, or the ability to objectively evaluate oneself with a view to initiating change, the third factor that decides what is to be changed according to an autonomous hierarchy of values, and inner psychic transformation, the actual process of personality change. The dynamism of inner psychic transformation includes the transcending of somatic determinants of personality such as age and sex and the transcending of psychological type (i.e., extravert or introvert). Other dynamisms are self-awareness (pervasive knowledge of one's uniqueness), self-control (regulation of development and checking of regressive tendencies) and education-of-onself (constant conversion of experience and behaviour into means of personal growth). Somewhat similar to, or derived from, those already mentioned are the dynamisms of self-perfection and autopsychotherapy.

The final level of personality, secondary integration, has four dynamisms, the chief of which is the personality ideal. This dynamism is not a static ideal. In fact, Dabrowski deliberately allows some degree of vagueness in describing it since it is "only in the process of coming nearer and nearer ... (to it, that) ... we may become more aware of its true content" (Dabrowski, Kawczak & Piechowski, 1970:8). This dynamism is best considered as a process in which one intuitively and spontaneously unites oneself with the highest levels discovered in one's experience. The other dynamisms of level V are responsibility (the highest level of empathy) and the taking on of tasks for the sake of others and one's own development), authenticism (successful integration of unique and universal human qualities) and autonomy, which is freedom from dependence on biological drives and immunity to social pressures.

CHAPTER III

TEMPERAMENTAL PREREQUISITES FOR THE INTERIOR LIFE

Scholars of mysticism have remarked on the peculiar disposition that seems to characterize great contemplatives. This is commonly described as a marked tendency to emotional sensitivity to the point of nervous instability. This chapter provides: (1) a brief review of some of these descriptions of the mystical temperament; (2) some examples from biographical material; and (3) an alternative method of describing the mystical temperament. The alternative is Dabrowski's theory of overexcitabilities as constitutive elements of developmental potential.

There are some important advantages to looking at the mystical temperament in terms of a model of psychic overexcitability (OE), as opposed to a model of pathology. To begin with OE is a neutral term whereas words like hysteria, neurosis and melancholy are derogatory. Further, mystics are not born neurotic and many, if not most, do not remain neurotic. Neurosis (or hysteria or depression) can be seen as part of a stage of growth.

Thus pathological terms do not adequately describe the enduring temperament of mystics. On the other hand, according to positive disintegration theory the degree and kinds of psychic OE possessed by any given person constitute a permanent substrate of his or her personality. In mystics this psychic OE is abundant and while it may at certain stages, depending on a variety of circumstances, be expressed

in terms of pathological behaviours, these are not in themselves constitutive of the mystics' temperament. Thus the psychic OE model focusses on the essential disposition of persons in general, and mystics in particular, and not on its accidents. At the same time it describes temperament in terms of potential for personality growth.

Lacking a model such as psychic OE, writers on mysticism usually describe mystical temperament in pathological terms. According to William James (1929:8 & 24-26), religious geniuses display symptoms of nervous instability, a discordant inner life, and for at least part of their career, are given to melancholy. He notes that this is not unique to religious geniuses but can be found in geniuses in general. He insists, however, that this is only the case when neurotic mental imbalance is combined with a superior intellect. By way of explanation, James suggests that the neurotic's enhanced emotional susceptibility results in his or her ideas becoming dominant beliefs which impel to action. James concludes with the view that the neurotic temperament seems to be a prerequisite for receiving divine inspiration.

Both Friedrich von Hügel and Auguste Poulain are of a similar opinion. Von Hügel (1961:41-43) identifies potential "psychophysical sensitiveness" as the necessary condition for the cultivation of an interior life, the experience of ecstasy and even sanctity. Mystics and contemplatives are given to a monoidealism and an autosuggestion that is occasioned by a heightened psychophysical sensitivity. Poulain expresses his opinion on the matter in the following words:

It seems impossible to deny that certain temperaments seem more fitted for the unfolding of the mystic states Affective souls, delicate and refined, reflective and interior, of nervous temperament, almost morbid, are not all mystics; but they show some mystic tendency, in the profane sense of the word, in their bearing and in their

affections; and it seems that, if there are fields predisposed, as it were, for the graces of mystic prayer — and everything shows that this is so — these are such in a special degree. (Poulain, 1978:xcii)

Such a temperamental disposition is not unique to Christian mystics, but can be found also in outstanding religious personalities of other traditions. Christopher Isherwood (1965:29-35) recounts how Ramakrishna as a young boy would become so absorbed as to lose consciousness of his surroundings. In the midst of devotional or social activities he would be struck dumb, his body stiffen and become numb, and tears pour from his eyes. And throughout his life, according to Isherwood, Ramakrishna "was apt to be moved to ecstasy by watching performances of religious dramas" (Isherwood, 1965:35). Similarly, Paramahansa Yogananda in his autobiography (1973:3-12) refers to the obstinate crying spells of his infancy, his sadness over the fact that the family guru was no longer alive (he had never met the guru), as well as his visions of the family guru and of a constellation of Himalayan yogis.

The extant biographical material on Neo-Confucian sages provides no descriptions of childhood ecstasies or visions, but there is self-doubt, maladjustment and existential despair. Rodney Taylor (1982) reports the Neo-Confucian Hu Chih's description of his youth as misspent, excessive in desires and given to anger (particularly at the sight of evil). Hu was also plagued with strong feelings of self-doubt and personal inadequacy. In his autobiography he describes his internal conflict as follows:

My greatest weakness lay in loving lyrical composition and in addition there were many hatreds and desires. These three stabbed me within my breast; it was like a battle in which I was no longer able to endure. (Taylor, 1982:327)

Anne Miller Ch'ien describes the same sort of intense regret and anguish

in the life of Neo-Confucian Hu Chü-jen. His letters "reflect his groping after meaningful modes of self-cultivation and are shot through with laments over his state of confusion and his 'lack of progress" (Ch'ien, 1979:184).

From most, if not all of the world's mystical traditions, examples could be given of intense psychic disequilibrium, alienation and emotional sensitivity. Arasteh (1975) considers this intense psychic disequilibrium as essential for the psychospiritual growth of the Sufi. Finally, this same peculiar temperament can be found in the ideal religious personality of "primitive" religions. Robert Ellwood describes the personality of the potential shaman in these words:

Typically, the shaman is an individual who as a young man or woman exhibited strange, dissociated behavior. He or she displayed disturbing fits and trances, spent days wandering in the woods, and occasionally broke into berserk rampages in the villages. This young person would report the voices of gods and spirits. These voices would command all sorts of contradictions, forcing the individual to cry out for relief. This hysteria was a sign the individual must either become a shaman (one who controls such spirits) or end his or her life in insanity and early death. (Ellwood, 1980:44)

The above descriptions of the temperament that are said to characterize genius in general, and mystical genius in particular, are parallel to the descriptions of psychic overexcitability (OE) found in positive disintegration theory. Psychic OE denotes various types of heightened reaction to external and internal stimuli. It is one of the basic causes of inner tensions and conflicts, which in their turn make possible the development of personality (Dabrowski & Piechowski, 1977:31 and Dabrowski, 1972:125). Although strictly speaking psychic OE is distinct from neurotic or hysterical tendencies, in the earliest levels of development strong psychic OE inevitably is expressed in various forms of emotional

instability.

Thus intellectual and imaginal OE can give rise to obsessions and even a deficiency of the reality function as well as richness of dreams, ideas, inventions and creativity. Emotional OE can be expressed in the form of depression, anxiety, feelings of responsibility, concern with death, and feelings of loneliness (Dabrowski & Piechowski, 1977:79). Dabrowski further distinguishes between broad and narrow OE. Broad emotional OE takes hold of the whole psyche as in monoideism and contributes more substantially to personality disintegration, and subsequent reintegration, than the narrow form. Expressions of the narrow form include phobias, neuresthenia and hypochondria (Dabrowski & Piechowski, 1977:36).

On the basis of clinical observations, Dabrowski (1972:99) has concluded that individuals with significant developmental potential (i.e., with heightened OE), at the same time as being dominated by feelings of sadness, loneliness and isolation, frequently become interested in meditation and mysticism. Particularly relevant in this regard are over-excitabilities of the emotional, imaginal and intellectual kinds (Dabrowski, 1972:66 and Dabrowski, Kawczak & Sochanska, 1973:173). Although the average person who takes up meditation is rarely a potential mystic, by examining experimental studies of meditation, done over the last seventeen years, support can be found for the position that those who are disposed to meditate and those who succeed well in the practice tend to manifest greater psychic OE than controls. The next chapter will be a review of the studies that support this position.

CHAPTER IV

PREDISPOSITIONS OF MEDITATORS

One focus of meditation research is the personality characteristics of those who choose to begin meditating and of those who succeed at the practice. In this chapter, a number of such studies will be reviewed. Although the operational hypotheses of the researchers were not formulated from the perspective of any theory of personality development, much less from that of Dabrowski's model, the review will attempt to show that a constant implicit finding of these studies is that interest in, and success at, meditation correlates with psychic OE as described by Dabrowski. More specifically, interest in meditation usually correlates with emotional OE and success at meditation with imaginational or intellectual OE.

CAPACITY FOR ABSORPTION

A few studies suggest that prospective and successful meditators possess a higher capacity for absorption as measured by the Tellegen Absorption Scale. Tellegen and Atkinson (1974) developed this questionnaire while attempting to determine what personality factors are related to hypnotic susceptibility. The original test contained 71 items from various sources. Factor analysis revealed three major factors: stability, introversion and capacity for absorption. Only the latter was found to be consistently associated with hypnotic susceptibility.

The items that loaded on this factor became the Tellegen Absorption Scale (TAS).

In order to determine what correlation, if any, exists between hypnotic susceptibility and depth of meditation experience, Spanos, Rivers and Gottlieb (1978) had 43 male undergraduates participate in 11 meditation sessions. Two measures of imaginative capacity and the TAS were administered. Meditation depth was assessed by a four-item post-meditation questionnaire. In addition, the number of intrusions during the meditation periods were recorded by having the subjects press a button each time they noticed their mind wandering from the focus of attention (a Buddhist mandala). Scores on the two measures of imaginal ability and the TAS correlated positively with meditation depth and negatively with the number of recorded intrusions during meditation sessions. That is to say, those meditators who scored highest on the Tellegen Absorption Scale, and the two measures of imaginal ability, experienced the greatest amount of depth and the least amount of distraction during meditation.

In a later study, Rivers and Gottlieb (1981) had 140 undergraduate psychology students complete a battery of personality inventories and then offered the students a chance to participate in a meditation training program. Included in the personality questionnaires was the TAS. Those who volunteered to learn meditation had a significantly higher mean absorption score than those who declined the invitation. Although not strictly a meditation study, Davidson, Schwartz and Rothman (1976) did show that a flexible attentional style, as measured by EEG records of cortical patterning, was correlated with scores on the TAS. In an earlier study (cited in Davidson, et al., 1976) this same flexible

attentional style was found to characterize meditators.

Thus high scores on the Tellegen Absorption Scale predict likelihood of participation in meditation (when the opportunity is presented), depth of meditation experience and an attentional style that is characteristic of meditators. The relevance of this correlation is that the items typical of the TAS (Tellegen & Atkinson, 1974) correspond to the expressions of emotional and especially imaginal overexcitability (OE) found in Piechowski, 1979. Two sample items expressive of emotional OE are:

While acting in a play, I have sometimes really felt the emotions of the character and have "become" him (her) for the time being, forgetting, as it were, both myself and the audience.

It gives me -- or would give me -- deep satisfaction to devote myself to someone I care about.

Items characteristic of imaginal OE include the following:

I can sometimes recollect certain past experiences in my life with such clarity and vividness that it is like living them again or almost so.

If I wish, I can imagine (or daydream) some things so vividly that they hold my attention in the way a good movie or story does.

I am sometimes able to forget about my present self and get absorbed in a fantasy that I am someone else.

If I wish, I can imagine that my body is so heavy that I could not move it if I wanted to.

Thus high scores on the TAS are indicative of imaginal and even emotional OE.

ADAPTIVE REGRESSION AND TOLERANCE OF UNREALISTIC EXPERIENCE

Edward Maupin (1965), in a landmark study, concluded that depth of meditation response could be predicted by capacity for adaptive regression and tolerance for unrealistic experiences. Twenty-eight male

subjects concentrated on their breathing in a traditional Zen Buddhist manner each day for 45 minutes during a two-week period. Subsequent to each session the meditators described their experiences. On the basis of these descriptions experiences were classified on a continuum of five levels, ranging from "befogged" consciousness, in which concentration was very poor, to a very lucid state of awareness. Subjects who experienced the latter at least once were considered high responders. Medium responders were those who did not experience such a lucid state of awareness but who did experience one of the middle levels at least once. Poor responders were defined as those who experienced nothing more than the two lower levels.

Only one of the three measures of tolerance of unrealistic experience turned out to be significantly related to depth of meditation. It was the extent to which the Rorschach ink blots were comfortably accepted as an opportunity for projection. The intolerant person was defined as maintaining a critical and cautious attitude toward his own responses — i.e., he could not give free reign to his imagination and feelings in a relaxed manner. Two tests of capacity for adaptive regression correlated with meditation response. The first was a system of scoring Rorschach protocols for the amount of primary process thinking and the second was the amount of visual imagery reported during a free association task. While a pure example of primary process thinking in Freudian theory would be nocturnal dream content, daydreaming, imaginative and creative activity and emotional thinking are partial manifestations of primary process (Rycroft, 1972:124-125). Primary process thinking is opposed to secondary process thinking which is constrained by the rules of logic and grammar.

It is not necessary to explore the theoretical implications of concepts such as tolerance of unrealistic experience, adaptive regression and primary process thinking. It is sufficient for the purposes of this study to recognize that the measures used by Maupin are clearly indicators of psychic OE particularly of the emotional and imaginational varieties.

NEGATIVELY PERCEIVED SELF AND HYPOCHONDRIASIS

Delmonte (1981) conducted a study on 94 members of the general public who attended introductory lectures at a Transcendental Meditation centre. Following the talks 36 persons decided against taking up meditation. All 94 were pretested on a measure of perceived-self. Those who took up meditation had initially more negative perceived-selves than those who decided not to begin TM. The questionnaire used to determine perceived-self consisted of 14 items, most of which were symptoms of psychosomatic disorder. Correlations with expressions of psychic OE, as described by Piechowski (1979), are apparent. At least two items (nervous twitches and impulsive actions) are examples of psychomotor OE. Lack of control over thoughts is an expression of imaginational OE. Most of the other items are manifestations of one form or another of emotional OE -- i.e., anxiety, insomnia, depression, muscular tension, mental and physical fatigue and various bodily aches and pains.

In one of the few experiments done on Christian meditators (Akers, Tucker, Roth & Vidiloff, 1977) similar results were obtained. These researchers had 15 seminary students concentrate on an arithmetic task prior to the meditation period. During both the control (arithmetic task) and the meditation periods, electroencephalographic signals were recorded. The measure of success in meditation was the amount of increase

in alpha wave production (indicative of a state of relaxed wakefulness) as the meditator moved from the arithmetic task to meditation. The results of previously administered Minnesota Multiphasic Personality Inventories (MMPI) were examined for correlations with the EEG results. It was found that the higher the score on the MMPI Hypochondriasis scale, the greater the increase in alpha wave production. Since a high score on the Hypochondriasis scale indicates the same kind of preoccupation with physical and mental health as Delmonte's 14-item questionnaire, it is likewise an indicator of psychic OE. Thus the results of Akers, et al. with Christian seminarians replicate Delmonte's findings in his study of those who volunteer for TM.

EMOTIONAL REACTION TO STRESS FILMS

Kanas and Horowitz (1977) compared reactions of premeditators (volunteers from TM residence courses in San Francisco) and controls to stress films. Subjects were asked to rank their subjective perception of stress on a 100-point scale before and after each of two stress films. They also rated themselves on a list of ten negative and positive affect words along a nine-point scale (from "not at all" to "extremely") as a further indication of their immediate mood. Following the viewing of the films subjects were instructed to sit quietly for ten minutes after which they were asked to estimate the percentage of time (during the quiet sitting) they spent thinking about the films, life issues, fantasies, etc.

Premeditators rated themselves as significantly more stressed following each of the two films as well as during the period of quiet sitting. Premeditators also scored higher on the affect words anger and disgust after seeing the stress films, and both before and after the films they

scored higher on nervousness, sadness and fear than did the controls. Life issues dominated the thoughts of ~~premeditators~~ only slightly more than controls during the quiet period, but during this same time premeditators reported less time thinking about the films and more time fantasizing. Whatever else the results indicate, there is no escaping the conclusion that the premeditators had a stronger emotional (and imaginal) reaction to the stress films than did the controls.

PERSONALITY CORRELATES OF ANXIETY REDUCTION AS A RESULT OF TM

A study of 49 Michigan State University students who practised Transcendental Meditation for a six-month period was conducted by Smith (1978). All subjects were given the State-Trait Anxiety Inventory (STAI), Cattell's 16 Personality Factor Questionnaire and the Tennessee Self-Concept Scale at the onset of the project and the STAI again at the end of six months. Success at meditation was measured in terms of anxiety reduction as measured by the STAI. Smith found that success at meditation, i.e., reduction in anxiety, correlated negatively with the pretest scores on personality integration (as measured by the Tennessee Scale) and with five factors of Cattell's questionnaire.

One of the Cattell factors that predicted anxiety reduction is called Autia. According to Cattell (see Smith, 1978:274) people who score higher on Autia tend to be unconventional, interested in art, theory, basic beliefs and spiritual matters. They are also imaginatively enthralled by inner creations, charmed by works of the imagination and completely absorbed by the momentum of their own thoughts following them wherever they may lead. Thus higher scores on Autia are indicative of intellectual and imaginal OE.

Another factor that correlated with anxiety reduction was Sizothymia. According to Cattell (1965:66), Sizothymic individuals are critical, cool, aloof, hard, precise, suspicious and rigid. Sizothymia is indicated if the subject answers "true" to the question, "I could stand to be a hermit?" It is likewise indicated if the subject says, "I would like to marry someone who is a thoughtful companion" as opposed to "someone who is effective in a social group." Since those who score high on Sizothymia show a preference for solitude, reflection, precision and criticism, it is not unreasonable to suspect the presence of some measure of intellectual OE.

Further evidence of the presence of both imaginal and intellectual OE is provided in that anxiety reduction significantly correlated with the Desurgency scale and almost significantly ($p=.061$) with what Cattell calls Prensia. Among other things the Desurgency scale measures the degree to which one enjoys imaginative fancies (Cattell, 1965:96). High scores on the Prensia scale are indicative of a desire for seclusion and introspection (Cattell, 1965:92).

JUNGLIAN TYPOLOGICAL ANALYSIS OF MEDITATION VOLUNTEERS

Fling, Thomas and Gallaher (1981) solicited meditation volunteers through campus newspaper notices and posters. The Myers-Briggs Type Indicator (MBTI) was administered to the 67 volunteers. The MBTI measures the relative strength of sensation (S) vs. intuition (N) in perceiving information, or thinking (T) vs. feeling (F) in evaluating or judging information, and of extraversion (E) vs. introversion (I). The MBTI has an additional scale which determines general preference for judging (J) vs. perceiving (P).

Fling and her colleagues found that the meditation volunteers had

a preference for introversion (61%), intuition (74.6%), feeling (58.2%) and perceiving (74.6%). In contrast to the 8.0% liberal arts male freshmen and the 3.8% Long Island University females who were typed as INFP (according to a report in the MBTI Manual) 22.5% of the meditation volunteers belonged to this category. Thus on the average those interested in meditation tend to be oriented more toward internal than external reality and to be oriented more toward perceiving than evaluating. In their perceiving they prefer an intuitive or wholistic approach as opposed to a sensation or detailed approach, and in their evaluation of what is perceived they prefer to rely on feeling rather than on logical thinking.

These results are consistent with Jung's theoretical analysis in his Psychological Types. Jung describes four categories of introvert and extravert: the intuitive, sensation, thinking and feeling types. Since the "meditative type" expresses a preference for perceiving over judging, his or her mode of perceiving is of greater importance than his or her mode of judging. Thus the typical meditation volunteer is primarily an introverted intuitive type. Jung says that introverted intuition produces "the mystical dreamer and seer on the one hand, the artist and crank on the other" (Jung, 1971:401).

In her 1979 doctoral dissertation comparing personal growth in counselors and non-counselors, Katherine Lysy made use of the MBTI and the Overexcitabilities Questionnaire (OEQ). The latter is a 41-item free-response instrument developed by Michael Piechowski to measure the strength of psychic overexcitability. Lysy (1979:74 & 105) found that a preference for the perceiving, as opposed to judging function was correlated with imaginal overexcitability and that a preference for

intuition, as opposed to sensation, correlated with both imaginational and emotional OE.

THE QUEST FOR INNER HARMONY

For his doctoral dissertation, Ted Nordquist (1978) did a study of a meditation commune which follows the teaching of Paramahansa Yogananda. One of the instruments Nordquist used was Rokeach's Value Survey which requires respondents to rank a set of 18 terminal and a set of 18 instrumental values in order of preference (i.e., from one to 18). The terminal values are as follows:

- A comfortable life
- An exciting life
- A sense of accomplishment
- A world at peace
- A world of beauty
- Equality
- Family security
- Freedom
- Happiness
- Inner Harmony
- Mature Love
- National security
- Pleasure
- Salvation or Self-realization
- Self-respect
- Social recognition
- True friendship
- Wisdom

Following each of the names of the 18 values is a brief complementary description in parentheses. For inner harmony, the one value that is of concern here, this description is "Freedom from inner conflict."

As would be expected the 28 members of the meditation commune ranked Self-Realization first and pleasure eighteenth. While this preference for salvation contrasts with the average American's rating of Salvation as ninth (Rokeach, 1979:133), the same place is given to Salvation by committed Orthodox Jews (Weisbord, Sherman & Sherman, 1980) and Roman Catholic seminarians (Rokeach, 1973:153). Pleasure receives roughly the same rank by all of the above-mentioned groups: eighteenth for seminarians and religiously committed Orthodox Jews and sixteenth for the average American. On the other hand, Inner harmony is ranked second for the meditators, fourth for the seminarians, sixth for the Orthodox Jews and twelfth for the average American. When Rokeach (1973:60, 64 & 74) analyzed the terminal value preferences in his sample of adult Americans by age, education and income, he found that a concern for Inner harmony increased only slightly as a function of both income and education level. The same value tended to be more important for those in their twenties but less so for children and older age groups. Even in the case of categories of the general adult sample who showed greater concern for Inner harmony, the ranking was never higher than eighth or ninth.

On the other hand, two other studies reported by Rokeach (1973:141 & 145) are also of interest. One was of a group of 78 hippies in the Detroit area in 1968 — the hippies ranked Inner harmony fifth. The second was a comparison of faculty members of five academic fields (business, biology, physical science, social science and fine arts) at Michigan State and Wayne State universities. Fine arts professors placed

Inner harmony third, physical scientists sixth and others eighth or ninth. Since emotional OE often manifests itself in inner conflicts such as inhibition, concern with death, anxieties, guilt and a sense of inadequacy (Piechowski, 1979), those who placed greater priority on achieving inner harmony very likely possess stronger emotional OE. Thus research with Rokeach's Value Survey indicates that the religiously committed (seminarians and Orthodox Jews) and hippies have more than average emotional reactions, but in the case of those drawn to the fine arts and meditation this is even more the case.

MOTIVES FOR TAKING UP MEDITATION

B. N. Ganguli (1982) of the University of Delhi administered a ten-page questionnaire to 230 American members of a meditation movement who were in India to visit their guru. In the section of the questionnaire that dealt with motivation respondents were asked to list any critical incident(s) which was (were) instrumental in their decision to join the meditation group. Thirty-four subjects (14.6%) either left the question unanswered or else replied that there was no critical incident influencing their decision. The rest replied either by mentioning specific incidents or else by describing critical life situations. All responses were assigned to one of several categories which Ganguli classified into major and minor motivating factors. Major factors were:

Need to understand occult phenomena
(mentioned by 37 members)

Depression
(mentioned by 34 members)

Need to understand existential problems
(mentioned by 28 members)

Disturbed life style
(mentioned by 21 members)

Drug abuse
(mentioned by 19 members)

Anxiety
(mentioned by 18 members)

Social isolation
(mentioned by 17 subjects)

Minor motivating factors (mentioned by no more than 11 and no fewer than five respondents) were as follows: (1) desire for growth and self-development; (2) desire for change and enjoyable experience; (3) identity problems; (4) marital stress; (5) alcoholism; (6) psychological ill-health; (7) physical ill-health; (8) stress due to separation from friends of the opposite sex; (9) need for group belongingness; (10) education stress; and (11) curiosity or desire to know.

Ganguli sees both major and minor motivating factors falling into Maslow's categories of either deficiency or growth needs. And on the basis of this finding he argues for a "therapeutic-cum-growth model" of motivation for meditation as opposed to the standard medical-therapeutic model. But many of the motives either designated as growth or deficiency needs are indicators of psychic OE. While this is less clear in some cases (e.g., marital stress and physical ill-health) the majority of motivational factors are expressive of emotional OE (e.g., depression, anxiety and psychological ill-health) or intellectual OE (e.g., the need to understand existential problems, need to understand occult phenomena and curiosity or the desire to know).

CONCLUSION

From the above literature review, it seems that interest in meditation, and success in its practice, correlates with the general presence of psychic OE. However, when those studies that focus on interest in

meditation are examined separately, it can be seen that the predominant form of OE is the emotional one. Those who begin, or who are about to begin, meditating show signs of psychomatic disorders (Delmonte, 1981) have a strong emotional reaction to stress films (Kanas & Horowitz, 1977), prefer to rely on feeling in making judgements (Fling, Thomas & Gallaher, 1981), seek inner harmony (Nordquist, 1978) and tend to be motivated by factors indicative of emotional OE (Ganguli, 1982). Imaginational and intellectual forms of OE are not absent, but it is the emotional form that predominates.

When success at meditation is the focus, emotional OE is usually not absent, but in three out of four studies, imaginational OE was present. In one of these, there were also indications of intellectual OE. Thus success in meditation correlates with capacity to give free rein to the imagination (Maupin, 1965), to engage in vivid fantasizing (Spands, Rivers & Gottlieb, 1978) and to be imaginatively enthralled by inner creations (Smith, 1978). Even in the study of Christian meditators (Akers, Tucker, Roth & Vidiloff, 1977) there are indicators of imaginational OE. The results showed a correlation between EEG patterns which indicate success at meditation and hypochondriasis. While primarily an expression of emotional OE, an exaggerated concern about one's health can also be a sign of an overactive imagination. In the Smith (1978) study, anxiety reduction correlated with some of the scales on Cattell's 16 Personality Factor Questionnaire. High scores on these scales were more indicative of imaginational and intellectual OE than they were of emotional OE.

Obviously no firm conclusions can be made. However, on the basis of the overall pattern at least two hypotheses can be suggested. The

first hypothesis is that the major motive for beginning to meditate is the presence of emotional OE. The second is that the ability to succeed at meditation depends primarily on the presence of imaginal over-excitability and possibly on the presence of intellectual OE as well.

CHAPTER V

THE RELIGIOUS PERSONALITY IDEAL

A sizeable portion of meditation research is concerned with describing the personality characteristics of those who take up the practice of meditation, and when the results are interpreted within the perspective of the theory of positive disintegration, they suggest that meditators possess a temperament similar in kind, though not in intensity, to that of religious mystics. In Dabrowski's terms individuals in both groups possess psychic OE. Another area of investigation is concerned with the effect of meditation on personality change. In Chapter VI this important body of research will be reviewed from the perspective of growth psychology. But before doing so it is necessary to determine just what constitutes personality growth in general and specifically growth toward the religious personality ideal. The purpose of this chapter is to identify a set of psychological dimensions common to the personality ideals of most religious traditions and to show that they are in fact characteristic of personality growth as described in the theory of positive disintegration.

In the teachings of the major world religions can be found attempts to describe the basic problem of human existence: i.e., the discrepancy between "what is" and "what ought to be." This problem is variously expressed as sin versus holiness, ignorance versus enlightenment, egocentricity versus selflessness, etc. The religious traditions also offer

antidotes, means, or a path whereby seekers can move from "what is" to "what ought to be." While the goal of the path may be discussed in terms of metaphysics and soteriology, there is also at least the implication of a process of psychological transformation toward an ideal of personality.

In one religious tradition the personality ideal is described as being the mystic in union with an impersonal universal soul, in another with an isolated monad, in yet another with a principle and in still others with a personal God. In some traditions individual existence is said to be lost, in others it is retained. However, these contradictions are problems for philosophical anthropology and theology -- they do not directly affect scientific psychology in which the concern is limited to reconciling empirical data and operational hypotheses. In an ultimate sense the philosophical and scientific enterprises may well be complementary and ideally they should be in dialogue with each other. Nevertheless, they are distinct disciplines each with its own field of investigation. The resolution of empirical problems is not a prerequisite for philosophical inquiry and neither must the resolution of philosophical dilemmas take place before a psychological investigation can be undertaken.

In order to identify dimensions of a common personality ideal scholarly descriptions of specific ideals were chosen from the following traditions: Christianity (Culligan, 1980 and Underhill, 1960), Confucianism (Berry, 1972), Hinayana Buddhism (Johansson, 1969), Hinduism (Ali Beg, 1970; Gajendragadkar, 1959 and Sachdeva, 1978), Judaism (Schechter, 1958), Neo-Confucianism (Taylor, 1978), Sikhism (Neki, 1975), Sufism (Arasteh, 1975 and Nasr, 1973) and Tibetan Buddhism (Govinda, 1960). Each work was examined for characteristics that could be

understood in a psychological sense, even if they were not expressed as such. For example, Schechter (1958:141 & 148) describes the Jewish saint as someone who is willing to accept guilt for the sins of others and who prays for all men, including the wicked. Both of these characteristics were taken as indications of universal empathy. In other cases personality traits were described in explicitly psychological terms. For example, Johansson (1969:124) claims that since the Buddhist arahant is free of the usual defense mechanisms, cognition is undistorted.

The next step was to list all the personality traits mentioned in the works referred to above. Although many traits were described in different terms, they were only listed once. Similarly traits that were considered to be very closely related, even though not identical, were listed only once. For example, the description of the ideal Neo-Confucian sage as one who has realized his true nature (Taylor, 1978:6) was considered to be referring to the same trait as Arasteh's (1975:157) description of the sufi as one who had realized his universal self.

Since a total of some 45 traits emerged, those traits that were most closely related were grouped together to form eleven personality factors. Although an attempt was made to be faithful to the available, though admittedly limited, sources, inevitably there is a large element of subjectivity in the choice of general categories and in the decisions regarding the appropriate category for each trait. There could just as well have been fourteen or eight factors and undoubtedly a trait here or there could as easily be placed in another category. Still the factors do describe personality dimensions found in religious ideals and they will serve as a useful structure for organizing a review of studies on the effects of meditation.

The eleven personality factors and the personality traits that constitute them are as follows:

I Personality Integration

- (1) personality integration
- (2) freedom from multiplicity
- (3) unified set of ethical and other principles
- (4) anima and animus united
- (5) integrated identity with self, society and cosmos

II Insight, Intuition and Wisdom

- (1) dynamic insight
- (2) knowledge received through intuition
- (3) wisdom
- (4) creativity

III Spontaneity

- (1) spontaneity
- (2) ease of movement
- (3) high degree of energy
- (4) flexible personality structure

IV Moral Integrity

- (1) truthfulness
- (2) honors commitments
- (3) reverence in conduct
- (4) sincerity
- (5) authenticity
- (6) vigilance
- (7) consciousness of sin

V Mental Health

- (1) freedom from psychic tension, complexes and anxiety
(with the exception of existential anxiety)
- (2) calmness of mind, peacefulness, contentment
- (3) lack of repression
- (4) more accurate perception of self

VI Empathy and Altruism

- (1) kindness toward fellow humans
- (2) kindness toward animals
- (3) love, compassion and empathy
- (4) identity with and concern for all mankind
- (5) extravagant giving
- (6) self-denial for the sake of others

VII Freedom From Biological Impulses

- (1) control over biological drives
- (2) absence of greed
- (3) absence of self-centred anger
- (4) mastery of sexual desire
- (5) reduction of basic needs

VIII Freedom From Social Pressure

- (1) freedom from slavish adherence to moral or
religious law (without being antinomian)
- (2) freedom from social expectations

IX Egolessness

- (1) absence of pride
- (2) humility
- (3) egolessness
- (4) detachment

X Identification With Higher Self, Cosmos and/or God

- (1) surrender to higher Self
- (2) love of suffering for love of God
- (3) realization of one's true Nature.

XI Openness to Experience

- (1) openness to all creation
- (2) openness to experiencing one's organism
- (3) unity and harmony with all things
- (4) total involvement
- (5) identity with cosmos
- (6) deeper significance attributed to existence

For illustrative purposes it might be useful to examine Neki's (1975) description of the satvic personality (as portrayed in the Sikh scriptures, especially the Adi Granth) for evidence of these eleven factors. The state in which full personality development is realized is called sahaja in the Sikh tradition. In someone who has attained sahaja new insights arise spontaneously (Factor II) and existence is seen to have a profound meaning (Factor XI). Such a person is a full participant in life (Factor XI again) and at the same time detached (Factor IX). His or her actions are effortless, artless and energetic (Factor IV). He or she is free from desires (Factor VII), social pressures (Factor VIII) and inner conflicts (Factor V). In the sahaja state one experiences inner harmony, self-integration (Factor I) and identifies with the real self (atman) behind the empirical self (jiva) (Factor X). In fact all eleven factors can be found in Neri's description of sahaja in terms of a mental health ideal.

In almost every tradition examined there were references to at least eight of the eleven factors. That not all the factors were found to be

equally present is due in part to the inevitably limited concerns of the works consulted. For example, Govinda (1960) does not mention the mental health or the moral integrity of the Tibetan Buddhist ideal. However, references to these can easily be found in other sources (e.g., Guenther, 1975). Also any given religious tradition will place more emphasis on some of the eleven personality factors than on others. And in some cases one factor may be subsumed under another.

THE RELIGIOUS IDEAL AND SECONDARY INTEGRATION

Even if one or more personality factors cannot be explicitly identified within a particular religion, their presence can be assumed, from Dabrowski's perspective, on the grounds that the presence of a majority of factors is a sign of secondary integration (level V) in which all eleven factors participate in a total Gestalt. An individual at level V possesses, by definition, an integrated personality, including positive integration of concepts (Dabrowski, 1973:126). Not only is the person who has achieved secondary integration creative, but creativity is integrated with higher emotions, intuition and analytical thinking, and cognition is more differentiated and flexible, i.e., there is a higher level of information processing (Dabrowski & Piechowski, 1977:107, 216 & 67).

The level V person can inhibit biological drives with ease, is free to reject or accept social norms of behaviour and has replaced pride with compassion (Dabrowski & Piechowski, 1977:108, 123, 193 & 182). There is an absence of psychoneuroses, regression and all anxieties, save those of an existential or transcendental kind (Dabrowski & Piechowski, 1977:201, 204 & 105). The presence of the Integrity Factor can be seen in the

level V person's sincerity, courage, commitment to truth, respectful attitude toward others, as well as in his or her sense of responsibility and justice (Dabrowski & Piechowski, 1977:186, 178, 102 & 140).

Finally, the true or higher self is analogous to what Dabrowski calls the personality ideal. This is the dynamism of the final level of integration, the existence and nature of which is apprehended in meditation and moments of creative inspiration (Dabrowski, 1970:80).

CHAPTER VI

• THE EFFECT OF MEDITATION ON THE PERSONALITY FACTORS CHARACTERISTIC OF THE RELIGIOUS IDEAL

Over the last seventeen years a considerable amount of research has been done on the psychological effects of meditation. It is the purpose of this chapter to review the reported effects that indicate the growth of the factors which are constitutive of an ideal religious personality.

PERSONALITY INTEGRATION

Two studies measuring the effect of meditation on personality integration are those of Sacks (1979), and Turnbull and Norris (1982). Sacks administered Loevinger's test of ego development to fifty Jesuit novices before and after they underwent an Ignatian thirty-day retreat which consists of a progressive series of meditations on biblical themes. Ego development, according to Loevinger, includes an increasing capacity to integrate the demands of one's various needs, responsibilities and relationships (Loevinger & Wessler, 1970:5-7). Sacks found that the novices scored significantly higher on the Loevinger Sentence Completion Test on the posttest than they did on the pretest. Specifically, they tended to move from a transitional point between Loevinger's conformist and conscientious stages toward the conscientious level proper. Loevinger considers that the advance in personality integration at the conscientious stage is due to the appropriation of long-term goals. A concern for conformity to internalized social standards is replaced by

a desire to realize personally chosen ideals which have been hierarchically organized. Thus on the assumption that the Sentence Completion Test is a valid measure of Loevinger's theoretical model, Sacks has provided evidence that meditation is a mediator of personality integration.

Turnbull and Norris were concerned with a more specific aspect of personality integration -- i.e., the degree of similarity perceived between the actual self and the ideal and social selves (social self being the image one imagines others to have of oneself). Seven university students who attended introductory talks on transcendental meditation formed the experimental group. They were each asked to choose a non-meditating friend similar to themselves to act as controls. Members of both groups separately evaluated their actual, ideal and social selves according to sixteen bipolar traits (e.g., optimistic vs. pessimistic, patient vs. impatient, sensitive vs. insensitive) on a seven-point scale. Both groups were tested on three occasions: test 1 was done just before the experimental group learned the TM method; test 2 was completed three days after the treatment group began meditating; and test 3 was done after one month of continued practice. While the control group showed no significant change the meditators exhibited a distinct decrease in distance between their actual selves and their ideal and social selves, indicating an increased congruence between the various elements of self-identity. Thus the research of Turnbull and Norris, as well as that of Sacks, provides empirical evidence that meditation facilitates the integration of the personality.

INSIGHT AND CREATIVITY

Jack Kornfield (1979) administered questionnaires and in some cases

conducted interviews with participants in two Buddhist insight meditation retreats — one for two weeks, the other for three months. The object of this phenomenological inquiry was to obtain information on the type of experiences occurring during the practice of meditation. The most frequently reported phenomena were organized into a total of 22 categories, two of which were "Psychological insights" and "Insights into basic mental and physical processes." In other words, insights of one kind or another were a frequent occurrence.

An experimental approach to the question of the influence of meditation on the production of insight can be found in Kindler, 1979.

Participants in the study were first-year graduate students of management at UCLA who were enrolled in a course on managerial problem solving. The students were randomly assigned to groups of five. All groups were required to solve two problems (as a group). Half of the groups meditated before attempting the second problem, the other groups served as controls. The pretest task was to reassemble a set of component pieces into a square. The posttest was similar — only in this case the task was to form a trapezoid. The author of the tests claims that the key to the solution lies in the ability of the group, after the failure of initial efforts, to obtain an insight that would permit a restructuring of the problem. Success in problem-solving was measured by: (1) the amount of time taken to assemble the square or trapezoid; and (2) the number of transactions (i.e., the number of times a piece was moved). The meditation and control groups showed no significant difference from each other on the pretest but the posttest showed that the experimental groups significantly increased their ability while the controls did not. Thus meditation appears to facilitate the acquisition of insights, at least

to facilitate the acquisition of insights into the restructuring of geometrical problems.

An experimental study concerned with the effect of meditation on creativity is reported in the Journal of Creative Behaviour (Travis, 1979). Thirty-five subjects who practiced TM for five months were compared to thirty-six controls. Tests taken from the Torrance Tests of Creative Thinking were used as the pretest and posttest measures. For the pretest both groups of subjects had to draw an object using a circle as the main part of the picture. In the posttest, the stimulus was parallel lines. Resultant productions were assessed for indicators of both originality and flexibility. On the pretest the experimental and control groups did not have significantly different scores for either originality or flexibility. However, posttest scores showed that meditators significantly increased their scores in both categories of assessment. The increased capacity for original production is directly relevant to creativity.

SPONTANEITY

Included in this factor are traits of spontaneity, high energy and flexibility. On the basis of Abraham Maslow's characteristics of self-actualization, Everett Shostrom devised the Personality Orientation Inventory (POI). The POI provides two major scales and ten subscales. The Spontaneity subscale, according to Shostrom (1976:35), "measures freedom to react spontaneously or to be oneself."

Larry Hjelle (1974) administered the POI to two groups. The first group was made up of experienced meditators who had been practising for an average of 22.63 months. The second group completed the personality test just prior to receiving instructions for meditation. The

experienced group scored significantly higher on the Spontaneity scale than did the novice meditators.

Although suggestive, due to the nature of the experimental design used, the Hjelle study is open to a serious criticism -- i.e., there is no way of knowing whether the difference in Spontaneity scores between the two groups is due to the practice of meditation or whether it is due to attrition. Not all those who begin meditation (in this case TM) stay in the program and it is possible that the drop-outs may be less spontaneous than the persistors, in which case the average score on the Spontaneity scale would rise, even if meditation had no effect on spontaneity.

However, there is evidence from three other sources (Seeman, Nidich & Banta, 1972; Nidich, Seeman & Dreskin, 1973; and Russie, 1976) that an increase in spontaneity is due not to attrition but to meditation itself. In all three studies both an experimental and a control group were used and both were pretested and posttested. In all cases the meditation groups showed a significant increase in spontaneity while the controls did not.

Also Kornfield's (1979) subjects reported that somatic, mental and emotional experiences during meditation proper occurred in a more spontaneous fashion than is usually the case in daily life. Thus the experience of getting into more direct contact with one's bodily sensations, feelings and thought processes may generalize to non-meditative awareness resulting in an overall increase in spontaneity.

Closely related to the trait of spontaneity is that of high energy. Jack Forem's book on Transcendental Meditation provides some anecdotal evidence for the effect of meditation on this particular trait.

According to Forem, increasing energy is the most frequently mentioned improvement among meditators. Some sample testimonials are:

I think the most profound change which came about through meditation is my increased energy. Before meditation I lacked the energy to do the things I wanted to do. (Forem, 1973:64)

I used to be always tired and exhausted, lazy and pale, etc. I now have color and quite a bit of energy. (Forem, 1973:64)

A full day's work no longer leaves me exhausted as it used to. In fact I haven't been exhausted of energy once since I began meditation. (Forem, 1973:64)

My energy has been my most dramatic change. (Forem, 1973:64)

FLEXIBILITY

While there is no direct evidence of increased flexibility in overall personality structure, in the Kornfield (1979) study meditators had a subjective sense that their minds had become more malleable. In terms of experimental evidence, Dillbeck (1982) found that meditation led to increased performance in a task requiring perceptual flexibility. The criterion measured was the amount of time required for the correct tachistoscopic identification of incongruous playing cards (e.g., a red six of spades). Due to habitual association patterns, identification of incongruous playing cards takes longer than the identification of normal ones. Subjects who had practised meditation for two weeks showed a significant decrease (from the pretest to the posttest) in the time required to recognize the incongruous cards, while the controls did not, thus indicating that meditation facilitates an increase in perceptual flexibility. This finding supports that of the already mentioned study by Travis (1979) -- i.e., that meditation facilitated an increase in flexibility (as well as in originality).

INTEGRITY

The influence of meditation on moral integrity has not been a focus for careful experimental research. Nystul and Garde (1977) did administer the Tennessee Self-concept Scale to both long-term meditators and non-meditators in Australia, and found that meditators scored significantly higher on the Moral Ethical Self subscale than did non-meditators. However, in the absence of a pretest, there is no way of knowing whether the results were due to meditation or sampling bias or attrition.

Anecdotal evidence that moral integrity is increased as a result of meditation is provided by Forem.

The following are excerpts from testimonials:

When I started meditation, I did not much consider my personal and religious values. There has been a complete change in this area. Meditation has given me an understanding of the nature of morality and what it means to be religious. I have become a truly moral and religious person. (Forem, 1974:178)

Before I started meditating, my values were pretty scrambled. I had a vague idea of how I "should" act, but I never really had the strength or the courage to practice what I considered a moral life ... however, since meditating, I've stopped trying to figure out how to act, and have just begun to behave naturally. Suddenly I found myself living a life that before meditating I wanted, but never thought I could have (Forem, 1974:179)

Wrong thoughts or wrong actions less and less frequently come into my consciousness. Even slight wrongs are becoming more and more foreign. When I was working at the delicatessen one night, I thought of stealing a sandwich but I couldn't do it. The thought came up and just went away. (Forem, 1974:180).

Clearly these citations have been selected by Forem for his own apologetic purposes (i.e., the promotion of TM). Nevertheless, they do show that at least some meditators consider an increase in moral integrity to be one of the benefits of meditation.

MENTAL HEALTH

Apart from studies on physiological effects, the influence of meditation on mental health is the most thoroughly researched area to date. Meditation has been found to reduce anxiety, neuroticism, depression and substance abuse. While there is an ongoing critique of the experimental designs (e.g., Smith, 1975) the cumulative evidence is impressive. A few examples can serve as illustrations.

Throll (1981) found that practitioners of both TM and Progressive Relaxation demonstrated significant decreases in anxiety (as measured by the Stait-Trait Anxiety Inventory) and neuroticism (as measured by Eysenck's Personality Inventory). However, in the case of the meditators the decrease in both anxiety and neuroticism was significantly larger. Winters and Kabat-Zinn (1981) report that 70% of anxiety and depression patients in a primary care unit at the University of Massachusetts Medical Centre, when taught "awareness meditation," have a 30%-50% reduction in symptoms during the first ten weeks.

One of the most carefully designed studies is that of Vahia, Doongaji, Jeste, Kapoor, Ardhapurkar and Ravindranath (1973) at King Edward VI Memorial Hospital in Bombay, India. Psychoneurotic patients who showed no improvement in response to previous therapy were randomly divided into two groups matched for age, sex, diagnosis and duration of illness. One group followed a program of yoga asanas (postures), pranayama (breath control), pratyahara (sense withdrawal) and meditation (dharana and dhyana). The other group practised only asanas, pranayama and pratyahara. The group that practised meditation showed a significantly greater improvement than the group that did not.

Patricia Carrington (1977:70-71) has summarized seven

psychotherapeutic benefits of meditation. The summary is based on an article by her and her husband Herman Ephron, which in its turn represents the accumulated evidence of their own and their colleagues' clinical experience. The summary is as follows:

- (1) Tension reduction: a general lessening of anxiety, disappearance of inappropriate startle responses, improvement in psychosomatic conditions (e.g., tension headaches, hypertension, insomnias and hypersomnias), reduced need for psychotropic medication.
- (2) Energy release: increased physical stamina, increased creative productivity, increased productiveness of free associations during the psychotherapeutic session.
- (3) Superego amelioration: lessened tendencies towards self-recrimination, lessened paranoid tendencies.
- (4) Mood stabilization: elevation and stabilization of mood in patients with neurotically determined depressions (although not ... in patients with acute depressive reactions. The latter tend to stop meditating even though they might be showing beneficial results ...).
- (5) Availability of affect: increased affective relatedness to others, increased availability of affect during psychotherapeutic sessions.
- (6) Individuation: increased sense of separate identity, increased self-assertiveness (the self rather than the expectations of others becoming the point of reference).
- (7) Antiaddictive properties: lessening of tendencies toward the abuse of marijuana, alcohol or cigarettes.

Thus both clinical observations and experimental results support the contention that mental health is fostered by the practice of meditation.

EMPATHY

Studies on the effect of meditation on one of Shostrom's Personal Orientation Inventory (POI) subscales provide evidence that the practice increases one's empathy for others. Shostrom (1976:35) describes one of the POI subscales, called Capacity for Intimate Contact, as a measure of the "capacity to develop intimate relationships unencumbered by expectations and obligations." Three studies (Nidich et al. 1973; Russie, 1976 and Seeman et al. 1972) report a significant increase in scores on the Capacity for Intimate Contact subscale for meditators (but not for controls) from pretest to posttest.

Terry Lesh (1970) examined the impact of four weeks of Zen meditation on counselors' ability to empathize with clients. Subjects viewed a videotape of a series of client-counselor interactions. After every scene they had 30 seconds to attempt to identify the feelings expressed by the client. The standard for evaluating the answers was based on a composite of (1) the client's descriptions of their own feelings on seeing the videotapes; (2) answers given by four experienced counselors; and (3) answers given by three judges who had full clinical data on each of the clients. Members of the experimental group, who practised zazen for thirty minutes each week day for four weeks, showed a significant increase in their empathy scores. Neither of two control groups showed any significant change.

Using a posttest-only control group design, Leung (1973) showed that students who were trained in meditative deep breathing and external

concentration were significantly more empathetic than those who did not receive the training. The criterion measure was the ability to anticipate how individuals, seen in videotape sequences would rate their actual selves, their ideal selves, their best friends, their ideal employers and their ideal teachers.

Thus whether empathy is evaluated by the POI Capacity for Intimate Contact subscale, or by other means, there is experimental evidence to show a significant increase as a result of meditation experience.

FREEDOM FROM BIOLOGICAL IMPULSES

A distinction between individuals can be made according to their degree of autonomic nervous system stability. Stability can be described as a complementary interaction between the sympathetic nervous system, which is dominant in emergency conditions, and the parasympathetic nervous system which is dominant in vegetative processes such as digestion, elimination and sexual arousal. The autonomically stable person shows less motor impulsivity, is less susceptible to conditioning, scores higher on tests of mental health and has more energy for productive activities than the autonomically labile person.

The frequency of spontaneous fluctuations in electrical skin resistance (due to perspiration), referred to as GSR or galvanic skin response, and GSR habituation to aversive stimuli, are both effective measures of autonomic stability. Stable persons (stables) exhibit consistently lower frequencies of spontaneous GSR than do labiles. Stables also habituate to aversive stimuli much more quickly than do labiles. Orme-Johnson (1973) found that long term meditators showed significantly lower frequencies of spontaneous GSR, and also that they habituated more

rapidly to repeatedly presented loud tones than did controls. Thus regular and long term meditation practice is associated with relative freedom from motor impulsivity.

FREEDOM FROM SOCIAL PRESSURE

Reliance upon others for the definition of one's attitudes, judgments, sentiments and views of oneself is correlated to a cognitive style characterized by Herman Witkin (1970) as field-dependent (as opposed to field-independent). Field-dependence and field-independence are defined as follows:

In a field-dependent mode of perceiving, perception is strongly dominated by the over-all organization of the field, and parts of the field (i.e., of experienced phenomena) are experienced as "fused." In a field-independent mode ... parts of the field are experienced as discrete from organized background.
(Witkin, 1970:196)

One of the tests of field-independence developed by Witkin is the Embedded-Figures Test (EFT) which requires the subject to locate simple figures in complex designs. The latter are so organized as to conceal the former.

Research has been conducted on the effects of TM (Pelletier, 1974), a meditative procedure using Guided Imagery (Cohen & Twenlow, 1981) and an approach similar to Buddhist mindfulness meditation (Linden, 1973) on EFT scores. All three studies used experimental and control groups in a pretest-posttest design. In all three the meditators became significantly more field-independent, thus providing evidence that meditation facilitates freedom from social pressure.

EGOLESSNESS

For his doctoral dissertation, Battis (1981) conducted interviews

with ten advanced practitioners of meditation in the Buddhist, Christian and Hindu traditions in order to determine something about the nature and causes of intuition and its relationship to meditation practice. Due to the focus of the interview questions, those interviewed were not asked directly if meditation was a factor in eliminating egocentricity, but this was implicit in the responses in general inasmuch as all agreed: (1) that meditation increased their intuitive capacity and (2) that the development of intuitive capacity required above all the elimination of pride or egoism. At least one respondent made the connection explicit: "We learn ... inner silence in order to starve the self-will ..."
(Battis, 1981:63).

Experimental evidence of decreased egoism as a result of meditation comes from research done at the University of Laval in Quebec (de Grace, 1976). The study found that the experimental group (practising Zen breath meditation) scored significantly lower (in contrast to the control group) on the posttest than on the pretest on two scales of the California Psychological Inventory, i.e., the Dominance and Capacity for status scales. According to de Grace, the results show that the meditators became less aggressive, less persistent, less manipulative and verbal, less ambitious, less preoccupied with their future and less interested in various aspects of social life.

These results indicate a decrease in pride or egoism on the part of the meditators. On the other hand, they could indicate a decrease in ego strength as well. However, this is unlikely to be the case since meditation has been shown to increase field independence (see above). Meditators have also been found to be less socially withdrawn, to be less socially inadequate and to possess a more positive self-image

(Hanley & Spates, 1978). In addition, Hjelle (1974) demonstrated that meditators have a more internal locus of control (i.e., perceive themselves to be more in control of circumstances affecting their lives) than non-meditators (Hjelle, 1974).

HIGHER SELF

Richard Kohr (1978) studied 141 participants in a meditation program that lasted for 28 days. Each person filled out a daily questionnaire regarding his or her meditation experience composed of 30 items given as nine-point scales. Scores for the first two weeks were averaged and compared with average scores for the final two weeks. Among the items whose scores "changed significantly, from the first to the last two weeks, were: (1) "At times I sensed an awe-inspiring presence"; and (2) "I felt that all inner resources were freely available to me." That is to say, meditators increasingly sensed an awe-inspiring presence and increasingly felt that all their inner resources were available to them. However, such awareness may be interpreted theologically or philosophically, the experience indicates that there is for meditators an identity, or a sense of self, that is not directly a product of (nor reinforced by) social interaction, but derives from the experience of inner stillness:

Based on a series of over fifty taped interviews, participant observation and personal experience, Preston (1982) describes and analyzes Zen ritual and meditation in terms of an increasing experience of, and identification with, a passively-attentive self. In Preston's experience both sitting meditation and meditative-ritual activities heighten awareness of this other modality of self:

The practitioner ... come(s) to notice periods of particular competence in the practices ... associated with non-verbal

consciousness or a passively-attentive attitude. The results of this insight is the realization of a personally satisfying and efficacious dimension of self that witnesses the activities. (Preston, 1982:268)

Preston further distinguishes between the ordinary sense of self and the passively-attentive self:

The self that is experienced as competent is not the self that was dominant when one began the practice. That self -- verbal, opinionated, seemingly in control -- is the one that is experienced to both interfere with competent action in the rituals and produce frustration and disappointment. Because of this, there is a tendency for the practitioner to gradually come to appreciate and identify with the passively-attentive self. (Preston, 1982:268)

On the basis of questionnaire data and interviews it can thus be seen that many, if not most, meditators experience an alternative mode of self, a witness self, as a result of meditation practice.

OPENNESS TO EXPERIENCE

That those who meditate become more open to experience is indicated by clinical observation, questionnaire data and experimental research. Specifically, there are findings to show that meditators become more open to other persons and more in touch with their own feelings. Patricia Carrington (1978:217-220) gives an account of the experience of two of her clients with meditation: both became more aware of their own feelings. And two studies (Nidich, Seeman & Dreskin, 1973 and Russie, 1975) found that meditators scored significantly higher in the Feeling Reactivity scale of the POI on the posttest than they did on the pretest. Shostrom (1976:34) has defined this scale as a measure of sensitivity to one's needs and feelings.

Meditation also increases openness toward the social environment. Hanley & Spates (1978) found that students who were regularly meditating scored significantly higher on a measure of tolerance for other people

than did non-meditating students. In itself these results (of a post-test-only design) do not prove that the increase in tolerance is due to meditation. On the other hand, Holeman and Seiler (1979) used a pretest-posttest design with members of a sensitivity training group as controls, and found that the meditators, but not the controls, significantly increased in their rated perception of others — i.e., on the posttest the meditators evaluated others more positively than on the pretest. Finally, Kornfield's (1979) informants reported experiencing "prolonged bliss and openness" and Kohr's (1978) subjects experienced a significant increase in one of the traits of openness, i.e., their perception of order in the universe. It appears thus that one result of meditation is an increased openness to both internal and external experience. This is consistent with the general expansion of consciousness reported by meditators in a number of studies (e.g., Kohr, 1978 and Kornfield, 1979).

CONCLUSION

Not all of the studies cited above are of equal weight. And even in the case of those that are examples of methodological rigor, there is inevitably some intervening variable that has not been accounted for. Thus in his review of the psychotherapeutic effects of meditation, Smith concluded as follows:

Without exception the studies reviewed show the regular practice of meditation to be associated with decrements in psychopathology, particularly anxiety, over a period of time ranging from 4-10 weeks. The effects of meditation persist when controls are included for initial group differences, passage of time, therapist support and reassurance, individual contact with therapist, and interpersonal contact with practising peers.

However this general finding is not clear evidence that meditation is in and of itself therapeutic. The critical therapeutic variables underlying meditation could be

something other than the meditation exercise. Two main possibilities not controlled for in the studies reviewed are (a) expectation of relief and (b) the regular practice of sitting quietly. (Smith, 1975:579)

Smith goes on to point out that even a placebo treatment will produce results when presented in such a way as to inspire confidence in its efficacy. In all the studies Smith reviewed either the instructors or the subjects, or both, were believers in the therapeutic potential of meditation. The previously mentioned Spanos, Rivers and Gottlieb (1978) study would seem to confirm Smith's criticism. Spanos, et al. found that success at meditation could be predicted from high scores on the Tellegen Absorption Scale. Although these results were taken, in the context of the fourth chapter as evidence of imaginational and emotional OE, it must be recalled that the Tellegen scale was designed as a measure of hypnotic susceptibility.

On the other hand, there are reasons for not imitating Smith's cautious conclusions in the present study. For many of the tests used in the research presented in this chapter it is hard to see how expectation would influence the results — e.g., assembling pieces of a puzzle, recognition of incongruous playing cards presented in a tachistoscope, habituation to noxious stimuli and recognition of embedded figures. In addition, Shostrom (1976:43) cites research in which subjects under instructions to fake good on the POI actually scored lower than when they answered the questions normally. Finally, the cumulative results of the many studies reviewed above would seem to indicate that something other than suggestion is at work.

CHAPTER VII

CONCLUSION

The purpose of this study has been to show: (1) that potential contemporary meditators share at least to a certain extent a common temperament with religious mystics, sages, arahants, etc. and that this temperament is better described in terms of psychic OE than in terms of psychopathology; and (2) that when the religious personality ideal is described in terms of growth psychology, a review of experimental research strongly indicates that meditation promotes development along personality dimensions characteristic of that religious ideal.

In the third chapter, descriptions of the temperament of religious personality ideals were presented from biographical material as well as from secondary sources, and this temperament was interpreted as the presence of psychic OE, especially the intellectual, imaginational and emotional forms of OE. In the fourth chapter, it was suggested, on the basis of a literature review, that those attracted to meditation and those who succeed in it also show signs of possessing OE.

Although neither Dabrowski nor his colleagues wrote comprehensively or at any length on the subject of meditation, throughout their works can be found many passing references to both meditation and contemplation.

And there are additional references to ecstasy, reflection, the need for solitude and related topics. In one of these Dabrowski (1972:99) says that "individuals endowed with great developmental potential (i.e., in

possession of psychic OE) experience ... change in the direction of opening interest in meditation and mystical phenomena." And particularly, "individuals with enhanced emotional, imaginal and intellectual excitability ... close themselves in the world of imagination, they isolate themselves ... they think or meditate" (Dabrowski, 1972:66).

Dabrowski's clinical observations lend support to the conclusions of the fourth chapter.

In the sixth chapter, experimental evidence of the effects of meditation on several personality factors were reviewed. These factors were shown, in the fifth chapter, to be constitutive of personality growth. Again, on the basis of clinical observation and the psychological analysis of historical figures, Dabrowski came to similar conclusions. Meditation is described as encouraging certain positive developmental functions while inhibiting those that retard development. Positive functions initiated by meditation include intuitive and synthetic thinking, ability to evaluate one's mental structure, awareness of one's weaknesses and achievements and a humble respect for higher human values (Dabrowski & Piechowski, 1977:55, 121 & 187 and Dabrowski, Kawczak & Sochanska, 1973: 82). Meditation practice also enables one to separate from one's instinctive structure, to become purified of impulsive tendencies, to relinquish lower values to which one has been attached and to disintegrate the self-preservation instinct, thus making personality development possible (Dabrowski, 1967:32-33 & 130).

Meditation is also seen by Dabrowski as playing a critical role in the promotion of developmental dynamisms:

The fundamental quality shaped by the everyday effort of the individual aiming at personality is the ability to meditate ...

it has its origins in a form of reflection, a predisposition for deep meditation, the ability to interrupt one's daily activities, and the need for frank "philosophizing" Retrospection and prospecting and periodic isolation of oneself give definite results here. They clearly promote all those activities which develop the inner environment and its hierarchy of values -- that is, they promote all the dynamisms of multilevel disintegration. (Dabrowski; 1967:166)

Individual dynamisms specifically mentioned as resulting from meditation are hierarchization, empathy, self-awareness and self-control, the disposing and directing centre, inner psychic transformation and the personality ideal (Dabrowski, 1967:166; Dabrowski, 1972:129 & 191; Dabrowski, Kawczak & Piechowski, 1970:70, and Dabrowski & Piechowski, 1977:51-52, 109, 141 & 171).

PERSONALITY LEVEL OF MEDITATORS

There are no published studies on the developmental level of meditators using any of the measures of the stages described by the theory of positive disintegration. However, some estimate of the developmental level of meditators can be made on the basis of three sources of information: Dabrowski's clinically based remarks, assessment of the developmental level of students using measures designed by Piechowski and two studies which used Loevinger's Sentence Completion Test in conjunction with Dabrowski's and Piechowski's theoretical comparison between the stages of positive disintegration and those of Loevinger's model.

According to positive disintegration theory, meditation is virtually impossible in the first stage of development since there is a low tolerance for solitude and a general incapacity for self-evaluation. In general, cognitive activities at this level operate in the service of basic needs and in complete isolation from other forms of behaviour (Dabrowski & Piechowski, 1977:108, 148 & 170). Whereas in level I the

emotional and intellectual functions do not interact at all, in level II they begin to do so and this results in a certain limited capacity for retrospection, prospection and analysis, making possible a primitive knowledge of oneself (Dabrowski & Piechowski, 1977:149). In this level there is in fact a small degree of interiorization and some, even if superficial, introspection (Dabrowski & Piechowski, 1977:108) Thus it seems that meditation is virtually impossible in primary integration (level I). And a very limited capacity exists in those at unilevel disintegration (level II). The situation is somewhat different for those in the upper part of level II (at the interface between levels II and III). At this point there arises the kind of psychic tension (i.e., of a multi-level kind) that provides the conditions for the development of new viewpoints, ideas and attitudes. These are a reflection of the increased need for maladjustment to what is and adjustment to what ought to be — i.e., to new higher level phenomena (Dabrowski, 1972:128). At this point also psychomotor and sensual OE come under the control of emotional, imaginal and intellectual OE with the result that the first two forms lose their isolated character and the latter three acquire a higher potential for evolving stage three dynamisms (Dabrowski, 1972:130).

Reflective meditation has a role to play in the evolution of dynamisms of spontaneous multilevel disintegration (stage III). Reflection becomes combined with affective memory making possible a comparison between past and present experiences and actions. As the depth of reflection increases so does the manifestation of multilevel processes. For example, the more negative is the judgement of one's behaviour (as a result of comparisons between past and present and between what is and what ought to be), the stronger certain dynamisms become — e.g.,

dissatisfaction with oneself (and hence humility), empathy for others and subject-object in oneself (Dabrowski & Piechowski, 1977:108-109).

The movement from levels II to III is one in which an intellect subordinated to primitive drives is replaced by an intellect in collaboration with higher emotions. At this point there is experienced in meditation a growing calmness and a recollected concentration (i.e., few distractions) and an intimation that "new and important contents of consciousness are about to emerge" (Dabrowski, 1972:128-129).

In spontaneous multilevel disintegration proper (level III), solitude and meditation become needs and isolation is sought as a way of gaining self-understanding and insight into others. In the hierarchization of various areas of life (e.g., sexuality) meditative reflection and valuation are increasingly involved. There is frequently reflection and meditation on death and if mystical experiences ever occur their memory keeps returning and has a strong impact. Also at this stage can be found a need for solitary "contemplation" of nature and art (Dabrowski, 1977: 78, 169, 170-171 & 179).

In the above descriptions of meditation at the various developmental levels two points should be clarified. The first is that Dabrowski describes meditation in terms of content whereas in the beginning of this study meditation was defined in terms of a practice. There it was said that meditation is the practice of withdrawing attention, not only from outside involvements but even from one's stream of consciousness. While this is the goal, in fact all meditators experience a wide variety of "distractions" which can vary from minor bodily sensations to profound and overwhelming insights. Even though one-pointed concentration is the goal, its attainment is not easy, nor is it independent of the

multidimensional growth of the total personality. On the other hand, Dabrowski's descriptions of meditation in terms of discursive content are interspersed with references such as "recollected concentration" and "an increasing depth of meditation." There can be no depth if the mind is allowed free rein, no matter how profound the object of its inquiry. The way to depth is through one-pointed concentration. Thus there is in the practice of meditation an attempt to get away from reflection, which paradoxically results in more profound reflection.

The second point to be made is that spontaneous multilevel disintegration is characterized by a structure of dynamisms, most of which are self-critical and on first acquaintance seem to be self-defeating. It is therefore worth noting that self-criticism (e.g., as expressed in the dynamism of guilt) in this level does not originate in the Freudian superego, but in the ego. Superego guilt is typical of unilevel disintegration (see Ogburn, 1976). In spontaneous multilevel disintegration guilt and all the other critical dynamisms help the individual to make a realistic self-appraisal so that concrete steps can be taken toward further development.

From Dabrowski's description of the quality of meditation in levels I-III, it is apparent that whether spontaneous or organized, some form of meditation inevitably occurs in the third level. On the other hand, there can be no meditation as such in level I. As for level II, meditation of a limited kind is definitely possible and if undertaken will promote personality growth.

As to the probable level of the average meditator, there are a few indicators. Two studies have been published in which the developmental level of university students was assessed. Gage, Morse and Piechowski

(1981) found that their eight subjects ranged from level II to II-III. Lysy (1979) assessed the developmental level of student counselors and noncounselor students and found that her 42 subjects fell into the II to III range. Most of the students were in the upper half of level II. These results say nothing about meditators in particular, but they do confirm a general impression given by Dabrowski -- i.e., that those who are in level III or higher are few indeed. In an unpublished study I administered the Situation-choice Instrument to 11 undergraduate psychology students, to practitioners of yoga asanas and eight regular yoga meditators. The average scores for all three groups fell clearly into the upper range of level II, with only three subjects falling into either the lower half of level II or the lower half of level III. Although the average level of the meditators (and of asanas practitioners) was higher than that of the psychology students, the absence of test-retest reliability data for the instrument is grounds for caution in the interpretation of the results.

Another indicator of the developmental level of meditators consists of two studies in which Loevinger's Sentence Completion Test was used. Sacks (1979) found that Jesuit novices moved from the conformist-conscientious level to the conscientious level proper as a result of a thirty-day retreat. Rosen and Nordquist (1980) administered the test to 25 members of a meditation commune (based on the teachings of Paramahansa Yogananda). Eight were scored as being at the conformist level, 12 at the conformist-conscientious level, and five at the conscientious level. On theoretical grounds, Dabrowski and Piechowski (1977:22, 26 & 27) suggest that Loevinger's conformist level correlates with the upper half of primary integration (level I), that her conscientious-conformist level

correlates with unilevel disintegration (level II) and that her autonomous level correlates to spontaneous multilevel disintegration (stage III). No mention is made of the conscientious level, but since this stage comes between the conscientious-conformist and autonomous ones, it presumably correlates with either the upper half of level II, the interface between levels II and III or else the lower half of level III. Although mostly indirect the evidence from three sources indicates that in general meditators will be somewhere in level II, probably in the upper half. Thus one might reasonably expect that the effects of meditation would be a further disintegration of vestiges of primary integration and a promotion of functions and dynamisms typical of level III. An analysis of the eleven personality factors confirms this expectation. Although these factors are only found in their perfected form in secondary integration (level V), some of them begin in level II (e.g., freedom from biological impulses) and all of them can be found at least in a precursor form in level III.

TOWARDS AN EXPLANATION

There is as yet no adequate and comprehensive explanation as to how meditation produces changes in personality. A host of possible mediators have been suggested: oxygen consumption; skeletal muscular relaxation; global desensitization; sensory deprivation; regression in the service of the ego; hemispheric lateralization; interhemispheric synchrony; expectation effects; demand characteristics; and many more (Shapiro, 1980: 229-250). Possibly the search for a single mediator is misguided. However that may be, the theory of positive disintegration as yet is unable to solve the dilemma.

But the theory may be able to indicate some areas for further research. To begin with there are the hypotheses at the end of the fourth chapter. There it was suggested that emotional OE provides the primary motive for meditation and that imaginal OE, and possibly intellectual OE, provide the capacity. Emotional OE provides motivation because the stronger it is, the greater the intrapsychic conflict. This is true for all forms of OE (Dabrowski & Piechowski, 1977:65), but it is particularly true of the emotional kind, where inner conflict is often experienced in interpersonal relationships:

Individuals with an emotional overexcitability will exhibit a strong need for emotional relationships with others to which they can give enormous investment. They will be upset if they hurt or disappoint these people. They will experience difficulty in breaking off an established relationship and in starting a new one. They will look for the meaning of life through a loved one and will experience anxiety on this loved one's behalf. In children this is often expressed in strong attachment to pets. Timidity and shyness are forms of inhibition which often accompany emotional overexcitability. (Piechowski, 1979:168)

The ultimate solution to the conflict caused by the presence of emotional OE is not simply relaxation, although undoubtedly this has a role to play. All the forms of OE, and especially the emotional form, must undergo a process of differentiation in preparation for a new type of synthesis or integration. In fact as Piechowski puts it:

In general we may suppose that in the sequence of development, dynamisms are the product of differentiation of forms of overexcitability. Certainly such dynamisms as dissatisfaction with oneself, disquietude with oneself, feelings of guilt, responsibility, empathy, are primarily derivatives of emotional overexcitability. They are its varied and more evolved forms. (Piechowski, 1975:292)

Dabrowski and his colleagues summarize the creative function of the three major forms of OE in this way:

Emotional overexcitability is of fundamental importance in the formation and shaping of a hierarchy of values, empathy, identification, self-consciousness, autonomy, etc....

Imaginational overexcitability is of great significance in artistic creativity, in positive infantilism, in the capacity for retrospection and propection, in intuitive planning and even in contemplation and ecstasy.

Intellectual overexcitability, especially in conjunction with emotional and imaginational overexcitability, gives rise to scholarly creativity, to the growth of reflection and self-control, of autonomy and authenticity

(Dabrowski, Kawczak & Sochanska, 1973:173) (My emphasis)

It would seem that the motive for meditation is conflict occasioned by strong emotional OE. Those who possess imaginational OE are able to concentrate well — i.e., they can succeed at meditation in the sense of experiencing fewer distractions. Through the practice of meditation, and in all probability due to the presence of intellectual OE, the meditator is able to differentiate between various feelings. Included in the differentiation is the distinction between higher and lower emotions. In the process of differentiation new, multilevel dynamisms emerge which may not minimize conflict very significantly but they are able to harness it in the service of personality growth.

Of course these speculations require empirical verification. Does interest in meditation actually correlate with high scores on a direct measure of emotional OE? Does the ability to minimize distraction correlate with a direct measure of imaginational OE? Does the capacity for differentiation of feelings correlate with intellectual OE? Are there single or multiple correlations between all three (or even all five) forms of OE and each of the eleven personality factors? The answers to these questions will not provide an explanation of meditation in terms of causality. They will, however, add to our knowledge of the

structure of personality growth and the function of meditation within that structure.

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