



Triśūla (Trident) Model of the Person

Trisūla

*Trident Model of Person in Indian Psychology**

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Classical Indian thought is a treasure grove of psychological thought waiting to be harvested. It is comprehensive and holistic. Its metatheoretical postulates help to overcome dichotomies and distinctions, such as sacred and secular, spirituality and science, which create artificial divides and make dialogue difficult between disciplines. In a sense, Indian psychology provides a new paradigm that overcomes such divisions and appears to be more appropriate for investigating some of the difficult and challenging areas that the currently dominant paradigm in psychology is unable to effectively address. These include conflict resolution at social level, epidemiological studies connecting religious beliefs and practices with better health outcomes, extraordinary human experiences, and the transformational possibilities of psychological science for developing human potential and wellness beyond ego adjustment and stress reduction.

Indian tradition is very pluralistic with diverse languages, religions, and schools of thought that flourished on the Indian soil for millennia. Therefore, in a significant sense, it would be wrong to speak of *the* Indian tradition or model. However, in relation to psychology in general, it may not be misleading to suggest that there are shared assumptions implicit among the dominant Indian thought systems that provide a foundation for a meaningful theoretical exercise and discourse in psychology that goes beyond the currently dominant paradigm that is extremely restrictive in scope and methods of study.

Psychology in the Indian tradition is an 'inner' discipline in search of realizing truth and perfection in the human condition. The overarching and ultimate goal of the person is to find oneself in an unconditioned and unmasked state. While assuming that consciousness is a basic and primary principle, Indian psychology studies consciousness in

* This chapter is a revised version of the one published earlier (Rao 2005) and is drawn in part from the book, *Cognitive Anomalies, Consciousness and Yoga* (Rao 2010).

its multifaceted manifestations and seeks to explore the experience of its true nature in one's being. Consciousness, however, means more than subjective awareness or reportable experience as generally understood in the Western psychological literature. It refers to the very ground condition of all forms of awareness; an intrinsic aspect of being itself. Indian psychology is not only a body of generalizable principles but also a set of practices that can be used for the transformation of the human condition towards perfection. It has its own methods appropriate to its subject matter and objectives. The methods are observational, but they are different from the externally oriented observations of 'outer' sciences. They are a peculiar blend of first-person and second-person perspectives with third-person ramifications. They provide for personal, subjective, and non-relational authenticity as well as in-group, intersubject validity (Rao 2002).

Indian psychology may be seen as a distinct system embedded in the classical Indian tradition. Centrality of consciousness is its distinctive characteristic. If consciousness is its core concept, Yoga, its theories and practices, constitute its foundational base. Consciousness is considered as the quintessential feature of being inasmuch as consciousness bestows meaning on being. While Indian psychology has its roots in Yoga, whose origins possibly date back to the time of Harappa civilization, which according to some accounts is older than the Vedic, it had grown fully in the Yoga system of Patañjali and was later incorporated into other systems. Further, it is not limited to orthodox Hindu systems of thought. It is also associated with unorthodox systems such as Buddhism and Jainism, and in fact, has become a significant aspect of some of the unorthodox schools such as Yogācāra in Buddhism.

In Indian psychology, we have a viable framework into which we may appropriately fit several psychological issues that the current mechanist, reductionist, and computer models are unable to meaningfully investigate. Obviously, there are fundamental differences between the Western psychology as practised now and Indian psychological thought contained in classical texts. These differences range from methodological preferences to theoretical assumptions, from the primary focus of subject matter to its practical orientations. In classical Indian psychology, the focus is on the person rather than on the object of experience. The emphasis is on the mental rather than the physical aspects of experience. We find that in classical Indian thought, metaphysical theories are grounded in psychological insights rather than built on physical facts. The intellectual exercise is more synthetic and less analytical in comparison to the West.

There is a widespread misapprehension that psychology based on classical Indian thought would be utterly speculative and other worldly. This is not the case. Again, somewhat surprisingly, classical Indian psychology is more practical than theoretical. It is oriented towards transcending the existential limitations and transforming the individual from a state of conditioned being to an unconditioned state of freedom and perfection enabling her to know truth (*satyam*), to practice virtue (*śivam*), and to appreciate beauty (*sundaram*). It is a positive psychology based on a holistic conception of human nature and the centrality of consciousness in the human condition.

Indian psychology has the potential to bring about a paradigmatic shift in the way we look at human beings and study them. In other words, here, we may find the contours of a new psychology that would help address

issues that appear intractable from the current psychological perspectives. What is particularly relevant is the fact that the central concern of Indian psychology is consciousness and that Indian psychology is inclusive of all facets of human behaviour and does not leave out even the so-called anomalies and hard to crack conundrums of consciousness from the Western perspective.

METATHEORETICAL FRAMEWORK

Yoga, as we have noted, is the bedrock of Indian psychology. In Yoga theory, being has two essential ingredients—the subjective and the objective. Subjectivity as such is epitomized in the being of the *puruṣa*. The primordial objective state is referred to as *prakṛti*. Subject and object would have remained forever two distinct categories of being with no possible association between them except for the fact that *prakṛti* contains in it an element that is akin to and has a special affinity with *puruṣa*. *Prakṛti* is a complex of three elements called *sattva*, *rajas*, and *tamas*. These may also be conceived as qualities (*gunas*) or attributes of *prakṛti*. *Sattva* element is that aspect of *prakṛti* that bestows subjectivity on all manifestations of *prakṛti* by its ability to reflect or absorb consciousness. For this reason, it is the meaning component of all objects evolving out of *prakṛti*. The technical term for it is *buddhi* in Yoga.

Unlike *puruṣa* (consciousness), *prakṛti* goes through evolutionary changes and manifests itself in various forms of physicality. Evolution is the process by which the physical being of *prakṛti* is transformed into psychic being and the object becomes a subject by reflecting consciousness in its being in various degrees. In gross physical objects like a mountain or a mole, consciousness illumines its *sattva* component and conveys the meaning of being a mountain or a mole.

Once the *sattva* becomes sufficiently refined and reinforced, as in the mind, then it will be able to reflect consciousness in its being and thus, in addition to being an object, it becomes a subject. Thus, there is the emergence of psychic being, which otherwise lays dormant. In the human condition, however, it is sufficiently evolved to be seen as coexisting with physical being with a distinctive identity and form. The person is consciousness embodied to the degree he/she is able to reflect consciousness in his/her being. In the process of reflecting consciousness, the person takes on an identity and becomes a knowing subject, in addition to being an object to be known.

The crowning achievement of biological evolution is the emergence of the mind capable of maintaining a continuing relationship/association with consciousness as a reflecting source. The highest state of the mind is one where it is able to reflect consciousness with no embellishments, which takes place when the mind is so pure that its *sattva* is essentially indistinguishable from consciousness-as-such. The person in that state partakes fully in consciousness and functions as a pure psychic being, transcending all the constraints of physical being. The quintessence of this is contained in the Yoga aphorism (III.56), which states that *kaivalya* is the state where the purity of *sattva* (in the mind) and *puruṣa* are equal.

In the primordial condition, the pre-evolutionary state, the physical and the psychical, the object and the subject are undifferentiated and consequently, the physical and the psychic remain essentially indistinguishable. In other words, *prakṛti* is the quintessential state of undifferentiated physical being just as *puruṣa* is in the quintessential state of undifferentiated subjectivity. In the evolutionary process, there is, as it were, a

gradual awakening of the subject as indicated by the manifestation of the mind and increasingly complex forms of knowing. Knowing is the basic feature of the mind. Evolution is a process by which knowing unfolds and an object becomes a subject. This is possible because the mind is the inherent existential link, the running thread that connects the two aspects of being, the physical and the psychic. The *sattvic* content of an object is illumined by the light of puruṣa and thus, the object becomes meaningful to a knowing subject. Sattva is thus the inherent information content in any given object. It is what enables consciousness to bestow meaning and makes an object knowable. At the same time, the sattva may evolve itself as a subject by reflecting consciousness instead of merely illumined by it. Thus, there is the awakening of the psychic being and the object becomes a knowing subject.

We find in the human condition, the emergence of sattva as the mind and a knowing subject. Thus, the person becomes both a subject and an object; knowing and being become two distinct aspects of the person. The pinnacle of the biological evolutionary process is the emergence of the mind as the knowing subject. In virtue of the mind, the person has transactional awareness with various degrees of excellence. Transactional awareness is the awareness made possible by the mind acting through its cognitive and sensory systems. It is what we experience in ordinary states. There is another mode of awareness qualitatively different from transactional awareness. It may be called transcendental awareness, which is direct intuitive knowing that does not involve sensory mediation.

The highly evolved mind is capable of partaking in pure subjectivity and realize consciousness-as-such in a non-sensory mode. When this happens, the physical being

is overshadowed and eclipsed; and knowing and being blend harmoniously so that we find in the person no cleavage between her belief and behaviour, cognition and conduct, knowing and being. In this state, consciousness is on its own. In between the insensate material state in an object and a state of pure consciousness in the realized person, there are various degrees of awareness.

In the Indian tradition, the goal of human endeavour, as mentioned, is to reach a state of perfection by knowing truth and realizing it in one's being. In biological evolution, knowing unfolds in various forms of cognitive excellence. The person is informed of truth but not made necessarily to realize it in her being. This requires an additional effort and takes place as a second phase of evolution which may be seen as 'psychic' evolution as distinct from the biological evolution. Instead of unfolding, there is enfolding of knowing in being. It is a state quite reverse of the physical being we find in insensate objects. It is a state in which the person is elevated to the highest levels of consciousness. It is what is implied in transcendental experience or spiritual realization.

The crucial and striking aspect of the Indian conception of the person is that the mind and consciousness are seen as qualitatively distinct. This distinction has important implications for psychological theory and practice. Further, it frees us from the compulsions of such disjunctive categorizations as subject/object, knower/known, physical/non-physical, natural/supernatural. Mind in the Indian tradition is the tool of awareness; it is one's reality connection. When it connects us to the world outside, that is, the physical, through the sensory system, we have transactional awareness; when this connection is to the psychic, there is transcendental realization. Consciousness in a significant

sense is the quintessence of existence inlaid in all its forms, physical and other. In the gross insensate objects, it is what gives them their meaning and identity. In sensate beings, it also manifests as the subject who has awareness and therefore, is capable of knowing the meaning of objects. In its highest state, it becomes the overarching aspect of being to the total eclipse of the physical. This is the state of highly evolved persons such as the prophets, saints, and self-realized persons, as we have come to know them.

At this juncture, it is necessary to remind ourselves of the crucial differences in the conception of 'consciousness' and mind in Indian and Western traditions. In current psychological discussions, consciousness and mind are not generally seen identical, while in philosophical discussions, the mind generally refers to consciousness as well. However, in psychology, consciousness is seen as no more than a species of mental phenomena. Mind includes besides consciousness, the unconscious. The mind itself refers essentially to the psychological processes that are involved in conscious and unconscious states. The Indian notion that mind is material may be interpreted as being not inconsistent with the scientific investigation of the mind as a set of processes, functions, and resultant phenomena. Buddhist philosophy of mind is a revealing example. However, the problem arises when one goes beyond reductionism and attempts to postulate a nonmaterial base for mental phenomena, as is the case in much of Indian thought. In the western tradition, such a postulation is preempted by limiting consciousness to no more than subjective awareness, which is itself either reduced to processes in the brain or equated with consciousness seen as nonmaterial and completely independent of the material substance. In either case, from the Western perspective,

there is no distinction at all between mind and consciousness.

TRISŪLA (TRIDENT) MODEL OF THE PERSON

From the given metatheoretical framework, we may derive a psychological model of the person. Yoga psychology presents such a model, which we may label as Trisūla (Trident) model. I see Trisūla as the icon representing the inherent nexus between body, mind, and consciousness in the person. Trisūla in the Hindu mythology is the weapon carried by Śiva, one among the divine trinity along with Viṣṇu and Brahma. Śiva is also considered the *ādi guru*, the first *yogin*. In the Trident model (T-M), the person is assumed to be the composite of body, mind, and consciousness. While consciousness connotes a variety of meanings and admits of different interpretations, it is considered, in this model, an irreducible and fundamental aspect of the person coextensive with the material. In Yoga, as we noted, it is called *puruṣa*. Consciousness has neither a beginning nor an end. It does not grow or diminish. Consciousness-as-such is ineffable, non-intentional, and non-relational. It has no form or appearance. It is undifferentiated subjectivity associated with all that exists as its information content, called *sattva* in Sāṃkhya-Yoga theory of matter (*prakṛti*). Knowing, feeling, and being go together undifferentiated in it. It is self-luminous as well as the source of illumination to all minds.

Consciousness is different from the mind. The latter is the active instrument of thought, feeling, and action in the person. Though primary, consciousness in a sense has a secondary role in the person. It is regarded as a 'witness' and given the role of an observer (*sākṣin*) rather than of an active player. Consciousness is reflected in the mind. The luminosity of the latter is a function of its

purity. The mind is physical and evolves out of prakṛti. However, it is different from the body we see. It is subtle, rarefied, and highly evolved matter. The mind does not generate consciousness; it simply reflects it. In the person, the mind is a flowing stream of thoughts, conscious as well as unconscious. Knowing, feeling, and being are seen in the mind as distinct. With its attributes of thinking, willing, and feeling, the mind becomes the knower, doer, and the experiencer. The mind may be functionally distinguished into three components. The *manas* is the central processor that continually attends to, filters, analyses, and assimilates the inputs received from sensory sources. *Ahamkāra* is the ego function that appropriates the processed inputs and engenders the sense of 'me' and self-consciousness. *Buddhi* is that aspect of the mind which has the closest affinity to consciousness. In virtue of *buddhi*, we discriminate, remember, and have unified awareness. In association with ego, it discharges the executive functions. In our ordinary states, *buddhi*, which is predominantly *sattva*, is embellished in various degrees by the presence of other two elements, *rajas* and *tamas*. However, it is possible to purify *buddhi* and make it to shed the distracting and obstructing elements. The *buddhi* in its untainted and purified form is almost like consciousness because its reflections of consciousness are so unblemished that they are indistinguishable from consciousness-as-such. This is a case where the copy is utterly indistinguishable from its original.

The body refers to the brain, the nervous system, the senses, and the rest of the supporting physical structures. Senses are the external organs, while the mind acts also as the internal sense. The senses are the doors that enable the mind to make contact with the

world of objects. The concept of 'sense' refers to the instruments of knowing (*jñānendriyās*) as well as of action (*karmendriyās*). The relationship between consciousness, mind, and body is not triangular but linear. The mind is connected with the bodily processes at the one end and with consciousness at the other. Thus, the mind is the interfacing instrumentality and the connecting link between consciousness and the body. It is the instrument that connects the physical and the psychical in the person.

The following twelve points provide the outline of T-M based on classical Indian psychological thought.

1. Psychology is the study of the person (*jiva*).
2. The person is not an isolated and disconnected entity in that *jiva* is transpersonal, bound by transcognitive states.
3. The person is consciousness embodied.
4. Consciousness-as-such is irreducibly distinct from the material objects, including the brain and the mind.
5. Mind is different from consciousness as well as the body/brain machine. Unlike consciousness, the mind is material, albeit subtle. Unlike the brain, the mind has non-local characteristics, that is, it is not constrained by time and space variables, as gross material objects are. Time and space are superimposed on the objects by the mind; they are thus the creations of the mind.
6. The mind may also be seen as the facilitating principle and function that interfaces consciousness at one end and the brain processes at the other.

7. Consciousness in the human context, that is, consciousness embodied, appears circumscribed, conditioned, and clouded by a vortex of forces generated by the mind–body connection. Consequently, the conditioned person becomes an instrument of individualized thought, passion, and action, an isolated person.
8. From individuation arise, on the one hand, subjectivity, rational thinking, and relativity of truth and values. On the other hand, the ego emerges as the organizing principle.
9. With the ego, come attachment and craving which lead the person, in turn, to experience anxiety, insecurity, stress, distress, disease, and suffering.
10. Situated in such an existential predicament of ignorance and suffering, the goal of human kind is liberation (*moksha*) by a process of deconditioning training and consequent transformation of the person to achieve higher states of awareness and achievement. This is accomplished by accessing consciousness-as-such and attaining transcognitive states.
11. Endowed with consciousness, mind, and body, the person is capable of brain-processed learning (*sravana*), mind-generated understanding (*manana*), and consciousness-accessed realization (*nididhyāsana*).
12. Yoga is a method of liberation via realization of transcognitive states. Realization takes different forms relative to the different dispositions of the seekers. These include: knowledge-focused *jnāna* yoga to meet the thought needs; devotion-filled *bhakti* yoga to deal with one's passionate nature; and

action-oriented *karma* yoga for those dominated by the impulse to act.

The given model makes a fundamental distinction between 'consciousness' and 'mind', and a secondary distinction between 'mind' and 'brain'. Consciousness is the knowledge side of the universe. It is the ground condition for all awareness. Consciousness is not a part or aspect of the mind, which, unlike consciousness, is corporeal. Consciousness does not interact with the mind or any other objects or processes of the physical universe. However, in association with consciousness, mental states with sufficient degree of complexity become subjective and are revealed to and realized by the person.

In this model, the mind is the interfacing instrumentality that faces consciousness on one side and the brain and the physical world on the other side. The mind, thus, gives the impression of having two faces: the physical side in its relation to the brain and other physical systems; and the subjective side facing consciousness/spirit. From the physical side, the mind collects information by processing the inputs it receives. This is normal cognitive processing. When the information thus processed is exposed to consciousness at the other end, that is, when the light of consciousness is reflected on it, there is conscious experience of the phenomenal data. In a reflexive situation, where the reflection of consciousness reflects back in consciousness (*pratibimba*), one has subjective awareness.

The mind, though physical like the brain, is different from it. The mind is closely connected to different systems of the brain. It influences and is influenced by events in the brain. Most Indian traditions assert that the mind is comprised of subtler forms of matter

than the brain. Consequently, it has different characteristics such as non-locality. Its subtle character makes it possible to receive the light of consciousness to reflect its contents. In virtue of its implicit non-local nature, it is possible for the mind to act on systems beyond the body complex with which it is associated. Such a conception of the mind leaves open the possibility that the mind may survive the destruction and cessation of the associated body.

The mind thus enjoys dual citizenship in the physical world as well as in the realm of consciousness. As a material form, the mind's citizenship in the material world is by birth as it were. Its naturalization in the domain of consciousness is a matter of choice and an outcome of significant effort. Its citizenship in the material realm bestows on it the right to process information through its sensory channels and neural connections. The mind also has involuntary and passive access to consciousness in that the light of consciousness shines on it to illumine its critically poised contents, which become subjectively revealed. The mind also has within its reach the possibility of partaking in consciousness-as-such by disciplined practice so that it may have direct and unmediated knowledge. This possibility is otherwise remote because of mind's habitual involvement with the sensory and cortical processes.

In the dual roles of the mind, two distinct processes, the cognitive and the transcognitive, aid the mind. The former involves sensory-motor processes. The transcognitive processes access consciousness-as-such and achieve pure conscious states. In normal cognitive processes, consciousness is reflected in the mind. Awareness consists in those reflections. In transcognitive processes, consciousness is realized in the mind. Awareness

in such a state consists in a relationship of identity with consciousness.

The main concern of psychology, in general, is with the normal cognitive processes of the mind. Therefore, the spotlight is on the brain and the sensory processes that give us information. Observational techniques from the third-person perspective are appropriately employed to study mental phenomena. Consciousness-as-such, which is not accessible to third-person observation, is lost sight of in scientific discussions. The consequence is a physical paradigm of the mind functioning in a mechanical universe. Functions of the mind, it is assumed, are best understood by identifying the correlated brain states. Significant shortcomings of this approach include: (a) Consciousness-as-such is routinely ignored; (b) higher states of consciousness generally remain outside the scope of consciousness studies; and (c) the interest in studying consciousness is confined to the theoretical side, with little appreciation of its practical implications for developing higher states of awareness. The goal has been one of maintaining normality rather than seeking to transcend for the better.

Indian psychology and Western psychology represent two distinct conceptual streams that flow in two different directions. The Indian stream focuses on the person and consciousness-as-such. Western psychology touches only the periphery of consciousness and thus, leaves out the transcendental experiences. Together the two streams appear to cover the entire spectrum of mental phenomena. Therefore, if there were a confluence between the two, we may be in a better position to understand the unity and nexus between mind, body, and consciousness. Development of Indian psychology would be an important exercise towards that end.

IMPLICATIONS AND APPLICATIONS

Important implications ensue from T-M of the person that has relevance to psychological theory, therapeutic practices, and social action. M.K. Gandhi's thoughts and actions may be seen as grounded in the given model of psychology. The concept of *satyagraha* and Gandhi's non-violent action themes for social change and moral reconstruction are landmark experiments in Indian psychology. Gandhi spoke of 'spiritual force'. He referred to 'inner voice' guiding him. His emphasis on truth, non-violence, love, compassion, and altruism are hallmarks of a broader perspective of human nature applied to life and social action (Gandhi 1938, 1958).

In Gandhi's view, violence and ego/desire/greed on the one hand, and non-violence, compassion and benevolence, and altruism, on the other, are part of human nature. However, while non-violence is intrinsic and natural to human condition, violence is adventitious and alien to human nature arising from the existential conditions. This is quite the opposite of the Hobbesian thesis that man is a power hungry, amoral, self-serving, and hedonistically driven animal who is held back by reason and fear from perpetual aggression and violence. For Gandhi, humans are essentially morally bound, loving, and non-violent beings who are driven to exploit others and engage in violence by the existential conditions of uncontrolled physical appetite and the lopsided development of ego, and the attendant desires, cravings, and frustrations that bias the person and distort truth. The ego is the agent of self-reference, the seat of identity, and source of conflict. It is the one governed by the pleasure principle and driven by physical appetites. It indeed shrouds the intrinsic altruism, the inner core of one's being. The process and practice of

satyagraha are designed, on the one hand, to decondition the *satyagrahi* from the learned habits of violence, free the person from prejudice, and enable him to unmask truth by dispelling ignorance. On the other hand, they generate spiritual force that helps transform those on the other side (the so-called adversary or opponent) by breaking down their biases, prejudices, and ignorance. So, they are awakened to their conscience and the inherent altruistic nature. This is the psychology that Gandhi learned from his tradition. He philosophized it in remarkable ways and applied it in several areas that included economics, sociology, education, and of course, politics.

ADJUSTMENT AND TRANSFORMATION OF THE EGO

In Indian psychology, one begins with the primacy of consciousness. *Atman* (Vedanta) or *puruṣa* (Sāṃkhya-Yoga) refers to consciousness-as-such, unclouded by and free from polluting accretions emanating from the sensory processes. Sri Aurobindo (1992) called it the 'psychic being' in the person. In Western psychology, especially in its applied therapeutic aspects, the ego aspect of the mind occupies the centre stage, taking the place of consciousness-as-such. It is the functioning of the ego that is of primary concern. Understanding the problems of adjustment of the ego and dysfunctions of the ego caused by chemical imbalances, childhood trauma, problems of sex, and so on has been the saga of much of Western clinical psychology and psychotherapeutic practices.

In Indian psychology, the ego is a manifestation of the mind and not of consciousness. It masks the true self. Shrouded by ignorance, the ego masquerades as the self. Therefore, the tearing down the veil of ignorance,

taming the ego, transcending the limiting adjuncts of the mind to allow the true light of consciousness to shine and reflect on the mind of the person, become the focus of Indian psychology. This is what is involved in the process of transformation of the person. Yoga, for example, is a method of training for such transformation. According to Sri Aurobindo, there are three intrapsychic processes involved in ego-transformation. They are aspiration, surrender, and rejection. Aspiration is the motivating factor, the driving force to feel the presence of the divine spirit. If spirit is consciousness-as-such, aspiration is the desire to access consciousness-as-such. Surrender refers to the openness to witness consciousness-as-such with no prior notions, attitudes, and expectations. Rejection is the throwing out all those ego accretions that clouded consciousness-as-such, so as to allow the unencumbered play of the psychic being. The function of the psychic being is accessing consciousness-as-such for experiencing pure conscious states (Sri Aurobindo 1992).

The currently dominant perspective in psychology pays more attention to ego-adjustment than ego-transformation. For example, the discussions often centre around the defence mechanisms. G.E. Vaillant (1993) in *The Wisdom of the Ego* provides a brilliant classification of the varieties of defence mechanisms and styles of functioning ranging from psychotic delusions to mature altruism and humor. All these styles, whether normal or aberrational, are attempts at adjustment and not transformation of the ego. Transformation involves tracing the route back from existential suffering, controlling craving and attachment, and transcending the limiting adjuncts of the mind so that the clouds of ignorance hovering around the person are dispelled and the person experiences states of pure consciousness. Such experiences are

the transformational resource and gateway to realization, the discovery of one's true self, and accessing consciousness-as-such. Indian psychology is positive psychology that promotes health, happiness, and joy in a non-ego binding manner. It is the joy of the self and not the pleasures of the ego that the transformed person experiences. General psychotherapeutic approach is horizontal, travelling across the existential contours of the ego. Indian psychology suggests the vertical way, elevating the person from the tangled ego to the sublime heights of altruism and transcendence, that is, states of pure conscious experience.

In the Western tradition, which conflates consciousness and the mind and considers intentionality as the defining characteristic of the mind, the possibility of the existence of pure conscious states, that is, consciousness without sensory content, is pre-empted. Consequently, mind/consciousness/spirit is either denied and reduced to processes in the brain as a variety of materialistic theories do, or left completely unfathomable as in radical dualist postulations with an unbridgeable chasm between mind and body.

UNDERSTANDING PSYCHIC PHENOMENA

There is indeed a general consensus among the research scientists involved in investigating psychic phenomena (Rao and Palmer 1987) that there is significant evidence in support of the existence of extrasensory perception (ESP) and psychokinesis (PK) which are labelled together as 'psi'. The ESP includes telepathy (paranormal awareness of others' thoughts), clairvoyance (awareness of information shielded from the senses), and precognition (extrasensory, non-inferential knowledge of future events). The PK is the direct action of mind over matter. There

is, however, a general lack of agreement as to what they mean. The explanatory void haunting psi phenomena has resulted in calling them anomalous, even by those investigating it. Also, it has breathed a lot of scepticism among the scientists watching the researches from outside. We can hardly expect scientists to have interest in things that make little sense.

Psi phenomena pose severe explanatory challenges within the Western paradigm of science. They refer to events that cannot simply occur in the physical universe as we know it. The basic limiting principles, as C.D. Broad (1953) labelled them, governing the assumptive base of science rule out the possibility of mind-to-mind communication that does not involve meaningful transformation of energy between minds. Similarly, non-inferential precognition is an absurdity. All attempts to naturalize the supernatural, that is what psi research hopes to do, result in the paradox of demolishing the very assumptive base of science by science itself. The attempts to find a naturalistic explanation of ESP and PK have not been successful. These include observational theories based on quantum mechanics (Irwin 1999).

I am inclined to argue that parapsychology is unlikely to make much headway if the research continues to employ the disjunctive Western conceptual categories. The most that could be established within Western paradigm is to provide extensive and even compelling evidence for the existence of cognitive anomalies. Beyond this, I venture to hazard that few insights into the nature of the phenomena themselves could be gained by methods that basically assume their non-existence.

In this context, T-M has something to offer and may indeed give a new direction and a fresh impetus to parapsychological

research. Psi phenomena do not fit into the one-dimensional framework of mind-body connection. The bidimensional model of T-M provides for non-local association between mind and the world outside. On this model, the carrier of psi is intuition; its source is consciousness-as-such. Intuition is radically different from perception. Perception is based in the lower regions of the mind, whereas intuition has its origin in consciousness-as-such, accessible to higher domains of the mind. Therefore, psi phenomena may be studied from the perspective of the psychic rather than the biological dimension.

Current orientation in parapsychological research is biological, whether or not it is explicitly admitted. It is the 'lower mind' approach that is essentially antithetical and inhospitable to intuition. The principal player of the lower mind is the ego and the stage is set by the sensory inputs and the past personal history of the individual. With the lower mind active and dominant, even when a person is exposed to a genuine intuition, she reflects on it. Reflection reduces intuition to thought, which employs altogether different criteria of validation. The instrumentality of intuition in the person is lost in the ego-driven mind.

On this model, then, control of the ego function and sensory inputs are expected to be conducive to the manifestation of psi. The two essential ingredients in Patañjali yoga are *abhyāsa* and *vairāgya*. The practice is to control the sensory inputs. Detachment is to check the ego. The practice of concentration and cultivation of detachment to worldly things go together; however, neither of them is sufficient to access consciousness-as-such. Again, Yoga practitioners are reminded repeatedly that they must ignore and not indulge in the paranormal phenomena.

This again is an acknowledgment that the intuitive abilities like psi should not be seen as instrumental for ego gratification but considered as signposts in the process of personal transformation towards reaching the goal of perfection.

In Indian psychology, there are concepts, methods, and models that could make a difference. In the classical Indian tradition, no sharp distinction is made between the natural and the supernatural, the scientific and the spiritual. At some level of awareness, even the subject-object dichotomy disappears. Consequently, neither the paradox of naturalizing the supernormal nor the perplexities of parapsychological research pose any serious threat for an understanding of the psychic process within the paradigm provided by Indian psychology.

SPIRITUAL DIMENSIONS OF HEALTH AND WELLNESS

Along with psi research are the recent investigations in the area of epidemiology of religion and clinical studies of the effect of religious and spiritual beliefs and practices on health and wellness. There are now many researchers actively engaged in researching this area. Koenig *et al.* (2001) review in their *Handbook of Religion and Health*, 1,200 research reports and 400 reviews.

Religion of one kind or another has existed in all societies; and it has had profound effects on the lives of those who practice it. Prayer is central to all religious practices. It is universal and ubiquitous, crossing cultural and geographical boundaries. It encompasses all religions, even those that do not specifically acknowledge an entity like God, as in Buddhism. Although the form and objects of worship may vary, offering prayers is a pervasive phenomenon that is considered neither unusual nor abnormal. According to a survey

published in 1996 by Princeton Religion Research Center, 96 per cent of the United States (US) population believes in God or a supernormal power. Despite the universally prevalent and largely shared religious behaviour and the belief that prayer is a means of propitiating Gods or invoking supernatural forces/abilities to help improve human condition, it is, until recently, a largely unexplored area by contemporary social scientists. However, during the past twenty years, there have been literally hundreds of research reports published in refereed journals.

There are several significant studies that have explored the relationship between religiosity and a variety of health conditions (Koenig *et al.* 2001). In about 150 studies on alcohol and drug abuse and religious involvement, most of the studies 'suggest less substance abuse and drug abuse and more successful rehabilitation among the more religious' (*ibid.*). Also, numerous studies investigated the effect of religion on mental health, delinquency, depression, heart disease, immune system dysfunction, cancer, and physical disability (for a comprehensive review of research in these areas, see *ibid.*).

Surveys of literature and meta-analysis of published research seem to confirm the claims of individual researchers linking religious practices with better health outcomes. For example, in a systematic and comprehensive review, Townsend *et al.* (2002) assessed the impact of religion on health outcomes. They reviewed all experiments involving randomized controlled trials published between 1996 and 1999 that assessed the relationship between religious practices and measurable health variables. The review revealed that 'religious involvement and spirituality are associated with better health outcomes, including greater longevity, coping skills, and health related quality of life and less anxiety'.

In a meta-analytic review of twenty-nine independent samples, McCullough *et al.* (2000) report that religious involvement has a strong positive influence of increased survival ($p < 0.001$).

If religious involvement does have beneficial health outcomes, as many of the published reports in the West seem to suggest, then we may ask: how does this relationship work? What is its modus operandi, the process that underlies the presumed effect? What is the channel? Who is the source? These important, though often tricky, questions have no easy answers. The favoured explanation is a secular one. Religious beliefs and practices may have psychological effects, which in turn bring about somatic changes. If indeed religious beliefs and activities help to reduce anxiety, stress, and depression, they could also help to shield their negative effects on general health and well-being.

As Koenig, Larson *et al.* (2001) surmise, when people become physically ill, many rely heavily on religious beliefs and practices to relieve stress, retain a sense of control, and maintain hope and sense of meaning and purpose in life. It is suggested that religion: (a) acts as a social support system; (b) reduces the sense of loss of control and helplessness; (c) provides a cognitive framework that reduces suffering and enhances self-esteem; (d) gives confidence that one, with the help of God, could influence the health condition; and (e) creates a mindset that enables the patient to relax and allow the body to heal itself. Again, the values engendered by religious involvement such as love, compassion, charity, benevolence, and altruism may help to successfully cope with debilitating anxiety, stress, and depression. All this may be true. Yet, there are issues that go beyond these explanations. For example, if the observed effects of distant intercessory prayer

on the health of patients, who did not even know that someone was praying for them, are genuine, as they seem to be, the given secular explanations become clearly inadequate. We need more than a healthy mindset on the part of the patient to recover from illness because someone, unknown to him, had prayed for his recovery. There may be more to religion than providing a helpful social and psychological support system. Consider, for example, the case of remote intercessory prayer and its ramifications for future research in the area that explores the effects of religious activities on health and well-being.

REMOTE INTERCESSORY PRAYER AND DISTANT HEALING

Michael Miovic (2004) in his book refers to two well-documented cases of spiritual healing by a Russian healer, Nicolai Levashov, reported by Koopman and Blasband (2002). In one case, a baby girl was completely healed from glioblastoma multiforme (GBM), considered the most aggressive form of brain cancer believed to be incurable and ultimately fatal. In another case, the same healer is reported to have successfully cured a boy who was diagnosed with testicular absence at the age of one month. At the age of eleven, serial tests of free testosterone showed near absence of any hormone production. Then, in 1999, Levashov began distant healing on the boy. By August of 2000, testosterone reached near normal levels. By 2002, doctors reviewing the case 'acknowledged that functional testicles had appeared in a genetic male who had passed well past the age at which testicles can develop' (Miovic 2004: 129).

A number of studies have given positive evidence linking intercessory prayer with beneficial health outcomes. Intercessory prayer involves praying for others' benefit. In some of these studies, the patients did

not know that someone was praying for them. Yet, their condition seemed to have improved compared to the control group of patients who did not have the benefit of someone praying for them. In a double-blind study involving 393 coronary care patients, Randolph Byrd (1988) divided his subjects into two randomized groups. One group was the intercessory prayer group and the other was the control group. Neither the physicians attending on them nor the patients themselves knew which patients were being prayed for. Also, those who actually offered prayers did not know the patients for whose recovery they were praying. Results showed that the patients in the intercessory prayer group experienced significantly fewer episodes of congestive heart failures ($p < 0.05$), fewer cardiac arrests ($p < 0.05$), received fewer antibiotics ($p < 0.005$), and required less respirator support and medication ($p < 0.0001$). Byrd's (ibid.) study was criticized for multiple analyses by Chibnall *et al.* (2001). However, J.E. Kennedy, on re-evaluating the data, concluded that 'the results for two of the outcome measures are significant at the .05 level even after conservatively correcting for 29 multiple analyses' (Kennedy 2002: 181). Harris *et al.* (1999) conducted a double-blind study of distant intercessory prayer with 990 patients in the cardiac care unit. In this study with randomized controlled trials, it was observed that the experimental group (the prayed-for patients) recovered better than the control group of patients. The results are statistically significant, even after correction for multiple analyses.

In a meta-analysis of published studies, Mueller *et al.* (2001) found that randomized controlled trials had shown a significant positive effect between intercessory prayer and recovery from coronary disease. They observed that addressing the spiritual needs

of the patient may enhance recovery from illness.

If these effects of distant intercessory prayer are genuine, as they seem to be, how do we explain them? The secular explanations of the sort considered earlier are clearly inadequate. It was clearly understood by those who offered the prayers that it was God who was involved, responding to the prayer to influence the health outcome of the patients. Are we then experimenting with God? Can science go beyond itself and deal with spirituality and the divine? This could be scary and frightening to those who assume the essential incompatibility of science and spirituality.

Impressed with the extensive publications in the area, Chibnall *et al.* (2001) toiled for a couple of years to do a methodologically sophisticated and conceptually unambiguous study to test the influence of distant intercessory prayer on health. They found themselves unable to proceed beyond a critical review of the published reports. Their paper, 'Experiments on Distant Intercessory Prayer: God, Science, and the Lesson of Messiah', turned out to be more a debunking exercise rather than a constructive contribution. They concluded that this area of research was simply unproductive. They argued, among other things, that the notion of intervention by supernatural beings does not simply meet the basic testability and explanatory requirements of science. They wrote: 'Science does not deny God, miracles, and the like, it merely neglects them. Science can not actualize spirituality, so why do we ask this of it?' This paper became quite influential among health professionals in the West for the reason that its rationale is quite consistent with the mindset that makes a clear separation between science and spirituality, between what is believed to be natural as distinguished from the supernatural, which is considered ex-hypothesis beyond the scope

of science. Such separation of the natural and the supernatural engenders among scientists the fear of trespassing into the sacred, which, it would seem, is one of the powerful reasons behind the efforts to fault researches in this and similar areas.

Comforting the critics of the studies reporting significant positive influence of intercessory prayer on health in humans are the results of a recent multi-million dollar study (Benson *et al.* 2006), funded by John Templeton Foundation in the US. This study of the therapeutic effects of intercessory prayer on cardiac bypass patients carried out by a team of sixteen researchers involved three groups of randomly assigned patients in six US hospitals. One group, numbering 604 patients, received intercessory prayer after being informed that they may or may not receive prayer. The second group of 597 patients did not receive the prayer after similar information that they may or may not receive the prayer. The third group of 601 subjects received intercessory prayer after they were told that they would receive such a prayer.

The subjects in the two prayed-for group's received fourteen days of prayer for uncomplicated recovery after the bypass surgery. The primary measure of outcome is the presence of any complication within thirty days of the surgery.

The results showed no significant benefit to the patients in the prayed-for groups over the control group of patients who did not receive any prayers. On the contrary, it was found that the patients in Group 3, who were told that they would receive and did, in fact, receive prayers, fared significantly worse compared to the other two groups. From this, the authors concluded that intercessory prayer itself 'had no effect on complication-free recovery' from the bypass surgery.

The publication of this study by Benson *et al.* (*ibid.*) was considered by several commentators as the final word on the efficacy of intercessory prayer, even though Benson himself leaves room for more studies. I believe, this study should not be considered alone. It is in the nature of studies in areas like this that you do not expect replication each time one conducts a study. It is the cumulative results of a number of studies evaluated by an appropriate meta-analysis that should guide our generalizations. Therefore, Benson *et al.* study should be seen not only in relation to other studies involving intercessory prayer but also along with a significant amount of literature available in related areas like studies of direct action of mind over matter or PK effects. Then, one realizes why these effects are not replicable on demand and why, occasionally, the observed effect is opposite of the one expected, which is technically known as psi-missing. Also, it would not be correct to say that there was no significant influence of intercessory prayer on health outcome in the study by Benson and associates, because the observed difference between the non-prayed for and prayed-for groups in this study is statistically significant. Parapsychological literature is replete with such effects (Rao 1965; Rhine 1952). Rather it was a negative or psi-missing effect, the one opposite of expectation. This is not that unusual as Rao's (1965, 2002) reviews have shown.

The argument that the researches in the religion-health area do not meet the testability requirements of science is unconvincing. In addition, there is no intrinsic reason to bring in God or supernatural beings as the source of observed effects of distant intercessory prayer on health. Consider, for example, the wealth of studies that show similar effects of the influence of direct mental influence on remote biological systems. There is a large

empirical database accumulated over the years by William Braud and associates that provides strong evidence suggestive of the possibility of influencing the physiology of a remotely situated person by sheer mental intention of another person. Braud and Schiltz (1991) reviewed eight separate experiments in which the subjects attempted to influence remote biological systems by simply wishing such a change. The crucial difference between prayer and such wishing is that no supernatural being is invoked in the wish phenomenon, unlike in the prayer, which is generally directed at seeking the help of God to grant the wish. The results of the experiments by Braud and associates show that a subject by mental intention alone could influence in the desired direction: (a) the autonomic nervous system activity of a remotely situated person; (b) the muscular tremor and ideo-motor reactions; (c) mental imagery of another person; and (d) the rate of hemolysis of human red blood cells in vitro.

There is no reference in these studies to supernatural beings or non-testable entities. As Braud points out, based on the overall statistical results, the distant mental influence effects are relatively reliable and robust. The magnitude of the effects is not trivial and is comparable to self-regulation effects. The ability to mentally influence is apparently widely distributed. Thus, these experiments not only show the feasibility of scientifically studying such phenomena as healing through distant intercessory prayer, but they suggest also that the source of the effect may be a living person and not necessarily an entity like God.

need of expansion. Psychology of the kind we discussed may provide a way of dealing with phenomena that are undeservedly left out by the mainstream science. The assumption of the separateness of science and spirituality is neither intrinsic nor sacrosanct, as is often made. One could explore the possibility of an orderly and meaningful transition between them without the reduction of one to the other. Observation is the key to scientific validation, because it allows for intersubject agreement; but what constitutes an observation has changed significantly over time. It is no longer limited to naked sensing of the phenomena. Instrumental observation is too remote from the observer and requires several interpretative steps in between. Yet, we consider meter readings and other indirect measures as genuine observations. First-person experience, which is denied legitimacy in science as a reliable datum, without the agreement of similarly situated other persons, may be brought into science by valid manoeuvres as a kind of observation acceptable in science. When this happens, it might be possible to find a way of closing the explanatory gap between science and 'inner' phenomena as in spirituality. For example, in the classical Indian tradition, as mentioned earlier, there is no unbridgeable gulf between science and spirituality, no serious explanatory gap between first-person and third-person perspectives. Inquiry is considered possible in both the domains. In a sense, the scope of science would be significantly enhanced by allowing the possibility of transition from first person to third person, possibly via

science and the so-called spiritual phenomena (Rao 2002).

Yoga psychology has much to offer to bridge the science–spirituality divide. There has been a great deal of scientific research on the effects of meditation on the states of mind and body. These effects seem to parallel those observed in studies that sought to link religious activities with health outcomes. A number of studies consider meditation as a self-regulation strategy that has relevance for managing stress, hypertension, and drug addictions (Goleman and Schwartz 1976; Patel 1993). Davidson *et al.* (1984) report results that showed ‘reliable decrement in trait anxiety across groups as a function of length of meditating’. A meta-analysis by Eppley *et al.* (1989), involving about 130 studies, confirmed that meditation, especially T-M, has the effect of reduced trait anxiety. John Astin (1997), among others, reported the beneficial effects of meditation on stress reduction. A study by Alexander *et al.* (1994) investigated the effects of various types of meditation on the mortality rate of elderly persons. They reported that 100 per cent of the subjects in the study who practised T-M survived during the follow-up period of three years, where the average survival rate was 62.6 per cent. Alexander *et al.* (*ibid.*) also point out that epidemiological studies show that people practising T-M had significantly lower inpatient and outpatient visits and expenditure than comparable control groups. In addition, there is credible evidence suggesting possible association between meditation and psychic abilities (Rao *et al.* 2001). The work of Braud and colleagues cited earlier and the positive relationship between meditation and psychic abilities provide a secular alternative to distant intercessory prayer. In fact, psychic healing practices are widely prevalent around the world. Therefore, study of prayer as a form

of meditation has interesting possibilities for research.

As I have attempted to show elsewhere (Rao 2002), Yoga psychology postulates the existence of non-sensory (transcognitive) processes of awareness, which seem to work in tandem with normal sensory processes in generating extraordinary abilities and manifesting parapsychological phenomena. This is rendered possible because mind appears to enjoy dual citizenship in the transcendental as well as empirical domains. Mind is the interfacing instrumentality that connects, at one end, with consciousness and with the processes of the brain at the other. Acceptance of the mind as the mediating instrumentality between consciousness and the brain, as in the T-M, gives rise to an epistemology that overcomes the limitations of reductionism and radical dualism.

In its association with consciousness, mind manifests extraordinary phenomena; and in interacting with the sensory processes, it gives rise to normal sensory/motor phenomena. The essential and distinguishing characteristic of the former is that it has the mark of realization different from understanding that results from sensory awareness. The crucial and extremely important distinction between learning, understanding, and realization is captured by the trimorphous formula of knowledge as mentioned in *Brihadāranyaka Upanishad* and accepted by several systems of Indian thought. *Sravaṇa*, *manana*, and *nididhyāsana* are three distinguishable processes of knowing: (a) knowing from sensory data (brain); (b) knowing by reflection (mind); and (c) realization by accessing consciousness-as-such.

Acceptance of the trimorphous formula of knowing and the primacy of consciousness as an irreducible ground condition for true knowledge leads to a paradigmatic shift in

understanding human nature and the different sources of information. The future of human sciences rests on how quickly the shift takes place and on the ingenuity of scientists in bridging the artificial chasm between science and spirituality by preparing the empirical ground for inclusive study of human nature. The T-M is a step in that direction.

REFERENCES

- Alexander, C.N., P. Robinson, D.W. Orne-Johnson, R.H. Schneider, and K.G. Walton. (1994), 'The Effects of Transcendental Meditation Compared to Other Methods of Relaxation and Meditation in Reducing Risk Factors, Morbidity, and Mortality', *Homeostasis*, 35(4 and 5): 243-63.
- Astin, J.A. (1997), 'Stress Reduction through Mindfulness Meditation: Effects on Psychological Symptomology, Sense of Control, and Spiritual Experiences', *Psychotherapy and Psychosomatics*, 66(2): 97-106.
- Benson, H., J.A. Dusek, J.B. Sherwood, P. Lam, C.F. Bethea, W. Carpenter, S. Levitsky, P.C. Hill, D.W. Clem Jr, M.K. Jain, D. Drumel, S.L. Kopecky, P.S. Mueller, D. Marek, S. Rollins, and P.L. Hibberd. (2006), 'Study of the Therapeutic Effects of Intercessory Prayer (STEP) in Cardiac Bypass Patients: A Multi Center Randomized Trial of Uncertainty and Certainty of Receiving Intercessory Prayer', *American Heart Journal*, 151(4): 934-42.
- Braud, W. and M.J. Schiltz. (1991), 'Conscious Interactions with Remote Biological Systems. Anomalous Intentionality Effects', *Subtle Energies*, 2(1): 1-46.
- Broad, C.D. (1953), *Religion, Philosophy and Psychological Research*, New York: Harcourt Brace.
- Byrd, R.C. (1988), 'Positive Therapeutic Effects of Intercessory Prayer in a Coronary Care Unit Population', *Southern Medical Journal*, 81(7): 826-9.
- Chibnall, J.T., J.M. Jeral, and M.A. Cerullo. (2001), 'Experiments in Distant Intercessory Prayer: God, Science, and the Lesson of Massah', *Archives of Internal Medicine*, 161(21): 2529-36.
- Davidson, R.J., D.J. Goleman, and E. Schwartz. (1984), 'Attentional and Affective Concomitants of Meditation: A Cross-sectional Study', in D.H. Shapiro, Jr and R.N. Walsh (eds), *Meditation: Classical and Contemporary Perspectives*, New York: Aldine, pp. 227-31.
- Eppley, K.R., A.I. Abrams, and J. Shear. (1989), 'Differential Effects of Relaxation Techniques on Trait Anxiety: A Meta Analysis', *Journal of Clinical Psychology*, 45(6): 957-74.
- Gandhi, M.K. (1938), *Hind Swaraj or Indian Home Rule*, Ahmedabad: Navjivan Publishing House.
- _____. (1958), *An Autobiography of the Story of my Experiments with Truth*, Ahmedabad: Navjivan Publishing House.
- Goleman, D. and G. Schwartz. (1976), 'Meditation as an Intervention in Stress Reactivity', *Journal of Consulting and Clinical Psychology*, 44: 456-66.
- Harris, W.S., M. Gowda, J.W. Kolb, C.P. Strychacz, J.L. Vacek, P.G. Jones, A. Forker, J.H. O'Keefe, and B.D. McCalliste. (1999), 'A Randomized, Controlled Trial of the Effect of Remote Intercessory Prayer on Outcomes in Patient Admitted to the Coronary Care Unit', *Archives of Internal Medicine*, 159: 2273-8.
- Irwin, H.J. (1999), *An Introduction to Parapsychology* (3rd edition), London: McFarland & Co.
- Kennedy, J.E. (2002), 'Commentary on "Experiments on Distant Intercessory Prayer" in *Archives of Internal Medicine*', *Journal of Parapsychology*, 66(2): 177-82.
- Koenig, H.G., D.B. Larson, and S.S. Larson. (2001), 'Religion and Coping with Serious Medical Illness', *Annals of Pharmacotherapy*, 35(3): 352-9.
- Koenig, H.G., M. McCullough, and D.B. Larson. (2001), *Handbook of Religion and Health: A Century of Research Reviewed*, New York: Oxford University Press.
- Koopman, B.G. and R.A. Blasband. (2002), 'Two Case Reports of Distant Healing: New Paradigms at Work?', *Alternative Therapy Health Medicine*, 8(1): 116-20.
- McCullough, M.E., W.T. Hoyt, D.B. Larson, H.G. Koenig, and C.E. Thoresen. (2000), 'Religious Involvement and Mortality: A Meta-analytic Review', *Health Psychology*, 19: 211-22.
- Miovic, M. (2004), 'Spirituality, Human Health and Wellness. Overview of the Field', Paper presented at the conference on 'Spirituality, Human Health and Wellness', Institute of Human Science and Service, Visakhapatnam, India, 26 January.

- Mueller, P.S., D.J. Plevak, and T.A. Rummans. (2001), 'Religion Involvement, Spirituality, and Medicine: Implications of Clinical Practice', *Mayo Clinic Proceedings*, 76(12): 1189–91.
- Patel, C.H. (1993), 'Yoga Based Therapy', in P.M. Lehrerand, and I.L. Woolfolk (eds), *Principles and Practice of Stress Management* (2nd edition), New York: Guilford Press, pp. 89–138.
- Rao, K.R. (1965), 'The Bidirectionality of Psi', *Journal of Parapsychology*, 29: 230–50.
- _____. (2002), *Consciousness Studies: Cross-cultural Perspectives*, Jefferson: McFarland & Co.
- _____. (2005), 'Psychology in the Indian Tradition: A Classical Model with Contemporary Relevance', *Psychological Studies*, 50(1): 1–8.
- _____. (2010), *Cognitive Anomalies, Consciousness and Yoga*, New Delhi: Center for Studies in Civilizations.
- Rao, K.R., H. Dukhan, and K.R. Rao (2001), 'Yogic Meditation, Psi Scoring in Forced-choice and Free-response Task', in K.R. Rao (ed.), *Basic Research in Parapsychology*, London: McFarland & Co., pp. 287–306.
- Rao, K.R. and J. Palmer. (1987), 'The Anomaly Called Psi: Recent Research and Criticism', *Behavioral and Brain Sciences*, 10(4): 539–55.
- Rhine, J.B. (1952), 'The Problem of Psi-missing', *Journal of Parapsychology*, 16: 90–129.
- Sri Aurobindo (1992), *Letters on Yoga*, Pondicherry: Sri Aurobindo Ashram.
- Townsend, M., V. Kladder, H. Ayele, and T. Mulligan. (2002), 'Systematic Review of Clinical Trials Examining the Effects of Religion on Health', *South Medical Journal*, 95(12): 1429–39.
- Vaillant, G.E. (1993), *The Wisdom of the Ego*, Cambridge, MA: Cambridge University Press.