

Paranormal Communication Psi-Conducive States

by William G. Braud

Relaxation, meditation, biofeedback, and several modes of altered consciousness are components of a psi-conducive "syndrome."

Findings from a number of different areas of study (including altered states of consciousness research, cognitive psychology, studies of man's two cerebral hemispheres, Eastern and esoteric philosophies, the mystical tradition, and parapsychology) suggest the existence of two "states" or "syndromes." One of these states appears to facilitate manifestations of the psi process—such phenomena as telepathy, clairvoyance, and precognition. The other state seems to interfere in some way with the psi process. Workers in our laboratory are engaged in a continuing investigation of these two syndromes.

Our own research findings, along with those of others, suggest that a *psi-conducive syndrome* does indeed exist, and that it has seven major characteristics. Some of these characteristics (or "symptoms") are physiological, some are psychological, and others are phenomenological.

One of the most obvious characteristics of persons in the psi-conducive state is that they are physically relaxed.

We were first impressed by this feature during an early experiment on the effect of hypnosis on the psi process. Our subject's good psi performance impressed us so much that we began to wonder what it was about the hypnosis state that made it so psi-conducive. Our first guess was that the muscular and mental relaxation so characteristic of hypnosis might be a major factor. Before beginning our own experiments, we reviewed the

William G. Braud is Associate Professor of Psychology at the University of Houston (Texas). Certain portions of this paper were presented at the Parapsychological Association meetings in Jamaica, New York, August 1974, and at the American Psychological Association meetings in New Orleans, Louisiana, September 3, 1974. parapsychological literature and found that relaxation did indeed play an important role in successful psi performance.

We wondered whether we might be able to facilitate psi in unselected subjects by having them deliberately relax their skeletal musculature. We attacked this question experimentally by having our subjects listen to and follow tape-recorded instructions for progressive relaxation (12), which involved alternately tensing and relaxing each muscle group of the body, beginning with the toes and ending with the head and facial muscles. When their bodies were very relaxed, our subjects attempted to gain psi impressions of colored art reproductions which had been randomly selected from a large pool of such pictures. An agent, who was always in normal consciousness and who was sensorily isolated from the subjects, viewed the target and attempted to "send" impressions to the relaxed subjects for a five-minute period. The subjects recorded their impressions of the hidden target picture in writing and drawings, and were later asked to compare their own impression protocols with the target pictures and alternative, control pictures which were never "sent" by the agent. [This procedure is technically known as "free response GESP"; subjects may psychically gain information about the target from the agent who views the target (telepathy), from the target itself (clairvoyance), or both.]

Statistical analyses of these protocol-target correspondences revealed significant evidence for the operation of psi in these subjects. Their impressions corresponded very closely with the target information. Seven of these exploratory experiments were conducted, and their overall results could be attributed to chance less than seven times in one million.

In the second phase of the research, we began to explore the role of relaxation in a more analytical manner. Subjects were again tested while in a relaxed state. Before the correspondences were rated, all subjects indicated their degree of relaxation on a ten-point scale. When the subjects were later dichotomized at the median in terms of their psi performance, it was found that "good" psi performers were significantly more relaxed than were "poor" psi performers. Thus, subjects listening to the same relaxation-inducing taped instructions actually relaxed in different degrees, and these degrees of relaxation were in turn related to degree of psi performance.

In the third phase of the research, we measured degree of relaxation objectively through the use of electromyographic (EMG) techniques. Half of our subjects listened to relaxation instructions; half listened to instructions designed to induce muscular tension. EMG activity from the frontalis (forehead) muscle group was recorded continuously throughout the experiment. We found that our relaxation subjects evidenced significant ESP during the tests, while our tension subjects scored at the level expected by chance. More important, across all subjects there was a significant, positive correlation between EMG-defined relaxation and psi; knowing a given subject's EMG score (an objective electrophysiological measure of degree of muscle activity or tension), we could accurately predict how he or she would perform on the ESP task. Recently, our work has been systematically replicated and extended by Rex Stanford and Brantz Mayer (22). In their experiment, volunteer women students underwent a procedure (identical to our own) designed to induce deep mental and physical relaxation and to increase their expectancy of success on the ESP task. Stanford and Mayer used a clairvoyance testing procedure in which subjects attempted to gain impressions of target pictures concealed in envelopes. Significant psi-hitting occurred in their experiment. They also found, through analysis of questionnaire data, a significant positive correlation between ESP performance and mental stillness and quietude at the beginning of the relaxation procedure.

Thus, carefully controlled laboratory experiments have confirmed the impression gained through a survey of anecdotal material: psi is facilitated by deep muscular relaxation. Such a relaxed state may be induced very easily through the use of the progressive relaxation techniques used in the studies just described (see also 3, 4). Relaxation could also be induced through chemical means (muscle relaxant drugs, such as Valium) or through biofeedback techniques in which the subject's EMG activity is monitored and revealed to the subject via light or tone signals. Such biofeedback techniques allow persons to develop voluntary control over internal systems (such as heart rate, blood pressure, EEG activity) previously thought to be beyond such control. EMG biofeedback training has been used successfully for the treatment of physical and psychological maladies, including migraine and tension headaches, anxiety reactions, and phobic reactions (5); it may also be useful in facilitating psi.

> A second characteristic "symptom" of the psi-conducive syndrome is reduced physical arousal or activation.

Although we have not investigated this factor directly in our own laboratory, ample evidence already exists in the literature that a state of lowered arousal is conducive to good psi performance. Degree of arousal may be measured in three general ways: autonomic nervous system recording, electroencephalographic recording, and measures of basal metabolic rate. The results of a number of experiments are consistent with the view that low arousal facilitates psi. Autonomic nervous system state measures which have been found to accompany facilitated psi (19) closely resemble physiological syndromes traditionally associated with low arousal. EEG indications sometimes associated with enhanced psi performance suggest an electrical correlate of the subjective state of relaxed awareness and of the physiological state of reduced arousal (10). Slowed alpha (alphoid) rhythms characterized two out-of-the-body experiences (which are sometimes accompanied by psi) studied in the laboratory (25). Meditative states, which have traditionally been associated with heightened psychic sensitivity, are characterized by low arousal (1, 14, 26).

Biofeedback techniques and self-control exercises are excellent means of

reducing level of arousal. Biofeedback could be employed on either the autonomic, central, or basal metabolic components of low arousal (or various combinations of these). Autogenic training is an interesting selfcontrol technique which has been employed quite successfully in reducing stress and arousal in medical and psychotherapeutic settings. It may also be an effective training method for entering the low-arousal psi-conducive syndrome. Briefly, autogenic training involves a reduction of exteroceptive and proprioceptive afferent stimulation, mental repetition of psychophysiologically adapted verbal formulas ("Heartbeat calm and regular," "My forehead is cool," etc.), and mental activity conceived as "passive concentration" (17).

The third characteristic is that psi receptivity is facilitated by a reduction in sensory input and processing.

Charles Honorton argues that relatively weak psi impressions may be more readily detected and recognized during periods in which the sensory "noise level" (including body tension) is minimized. When sensory inputs are attenuated, the number of irrelevant stimuli bombarding the subject is also attenuated, thereby increasing his ability to detect, recognize, and respond appropriately to psi stimuli (9). If Honorton's model is correct, it follows that any procedure which effectively reduces sensory-perceptual, somatic, and cognitive "noise" (which interferes with ordinarily weak psi "signals") should be effective in facilitating psi performance. The relaxation and low-arousal techniques just mentioned may aid in reducing internal noise, in quieting the internal environment. External distracting stimuli can be reduced or eliminated by isolating the subject from the usual sights and sounds that normally capture his attention. Honorton and his colleagues have performed a number of experiments in which a homogeneous visual field (ganzfeld) and continuous auditory stimulation were employed to regulate perceptual inputs and to maintain them at relatively constant, noninterfering levels. The procedure involved having the subjects relax while viewing a uniform source of illumination through halved ping-pong balls placed over their open eyes. At the same time, the subjects listened to relatively loud uniform auditory stimulation (white noise or monotonous ocean sounds). Excellent psi results were obtained when subjects were tested under these conditions of reduced sensory distraction. We have obtained similar results in our own laboratory.

Physically reducing external stimuli is one way of eliminating distraction, of allowing persons to attend to weak psi signals. Another method (and one which has not yet been exploited by parapsychologists) would involve training subjects to *ignore* distracting non-psi influences. This could be accomplished through the use of various *concentration exercises* and "*centering devices.*" Subjects might participate in a training program in which they learn to control their normally wandering minds by concentrating upon physical objects, mandalas,¹ breathing, mantras,² thoughts, or images. This acquired control of attention could then be directed at weak psi impressions.

It is interesting to note that these very ideas about distraction and concentration and their relation to psi were presented in a very systematic and sophisticated manner centuries ago by the founders of yoga, zen, and other formal meditative systems (cf. 20).

Another symptom of the psi-conducive syndrome is increased awareness of internal processes, feelings, and images (including dreams and fantasy).

In a series of experiments involving different state-altering procedures (hypnosis, EEG alpha biofeedback training, sensory isolation), Honorton and his co-workers demonstrated that subjects whose attention exhibited the greatest shifts from external (sensory) stimuli toward internally generated stimuli scored significantly better on ESP tasks than did those subjects whose attention remained externally oriented (9). The focus of attention was determined by having subjects give "state reports" at various times throughout the experiments. Honorton also demonstrated that subjects who were more sensitive to their own internal processes (in terms of better dream recall, creativity, and instructional sets to attend to subjective cues) scored better on various psi tasks than did subjects who were less sensitive to internal thoughts, feelings, and images.

An increased awareness of internal processes might be developed by actual practice in detecting and describing interoceptive events. Practice of dream recall, hypnosis, and suggestions to attend to internal events would appear to be useful. The prototype of what appears to be a promising technique for increasing internal awareness has been developed in our laboratory by Ed Charlesworth (7). An "imaginary dream" tape recording was produced which included four components: (a) a modified progressive relaxation technique, (b) deep breathing exercises, (c) guided visual imagery exercises in which the subject is asked to imagine traveling through several environmental scenes (meadow, forest, mountain, seashore), and (d) the use of natural environmental sounds to increase the "reality" of the imagery. During the course of the imaginary dream, the subject was allowed several occasions on which to gain psi impressions of a target slide being viewed by an agent. The subjects were able to become aware of the target picture to a significant degree. Most interestingly, the subjects and agents

¹A mandala (from the Sanskrit word for "circle" or "center") is a circular diagram designed to hold the attention during meditation and support the meditator's effort ¹⁰ maintain concentration. Mandalas were developed to a particularly high art form by Tibetan Buddhists.

² A mantra is a sound or pattern of sounds on which a meditator's attention is focused or centered as an aid to concentration. The originators of mantras held that the intoning of special sounds could actually induce particular states of consciousness. Perhaps the most well-known mantra is the Tibetan om mani padme hum. (who simultaneously listened to the same tape) frequently developed identical spontaneous imagery which had nothing to do with the target pictures and which was not suggested in any way by the tape content. Thus, psi appeared to be operating not only with respect to the actual target information, but also with respect to non-target-related thoughts, feelings, and images. Similar phenomena have been reported to occur in subjects engaged in "mutual hypnosis" (24).

> The fifth hypothesis suggests that psi is decreased with "action mode/left hemispheric functioning" and increased with "receptive mode/right hemispheric functioning."

Deikman (8) has outlined two major modes of functioning in man, which he termed "action mode" and "receptive mode." Ornstein (18) has summarized evidence from lesion and stimulation studies, split-brain research, dichotic listening experiments, and lateral eye movement research which together suggest that man's two cerebral hemispheres may process different kinds of information and that the "operating characteristics" of the hemispheres may differ. We can label these hemispheric idiosyncrasies as "left hemispheric functioning" and "right hemispheric functioning." It is my contention that the sorts of processes that occur during "action mode" functioning are very similar to what occurs during "left hemispheric functioning," and that together they comprise important features of a state which appears to be antagonistic to good psi functioning. Conversely, "receptive mode" and "right hemispheric" processes are quite similar, and together comprise an important component of what we have been describing as the psi-conducive state.

The psychological functions which are optimized during "action mode/ left hemispheric" functioning include: active striving; focused attending; logical thought processes; increased boundary perception; dominance of the formal over the sensory; and verbal, mathematical, temporal, abstract, analytical, lineal, digital, rational, and conscious functioning. This cluster of functions is certainly very useful to us in our adaptive interactions with externals. However, anecdotal evidence from parapsychologists and gifted sensitives alike suggests that the cluster tends to interfere with good psi performance.

The psychological functions which are optimized during "receptive mode/right hemispheric" functioning include: a more passive acceptance or appreciation; diffuse attending; paralogical thought processes; decreased boundary perception; dominance of the sensory over the formal; and imagery, spatial, concrete, holistic, nonlineal, analogical, intuitive, and unconscious functioning. While this cluster is not as adaptive as the one mentioned above in terms of our interactions with typical external situations, it is clearly valuable in other contexts. Gifted sensitives tell us that they function psychically much better while in the receptive/right hemispheric mode. Creativity seems to be more at home with receptive/right hemispheric functioning than with the action/left hemispheric mode.

That "receptive mode/right hemispheric functioning" facilitates psi is the most speculative suggestion of this article. Intuitively, it certainly seems to be correct. Those who study psychics and the psychics themselves agree that these two general clusters or ways of functioning do indeed exist and that one favors psi while the other interferes with it. However, much research is needed before this speculation can be fully justified.

We have conducted two experiments which suggest that we may be on the right track. In the first, we attempted to evoke the two ways of functioning in different groups of subjects and measured their psi functioning immediately afterwards. We thought that the presentation of an "analytical" cluster of tasks would engage or exercise the "action mode/ left hemisphere type of functioning," resulting in a shift toward the psi antagonistic syndrome and consequent interference with GESP psi performance. On the other hand, the presentation of a "nonanalytical" task cluster should promote "receptive mode/right hemispheric functioning," resulting in a shift toward the psi-conducive state and consequent facilitation of psi performance.

The two task clusters were presented via tape recordings. The "action/ left" tape included: counting the letters in words, mathematical problems, mentally diagraming sentences, solving various problems involving logic and reasoning, analogies, time-estimation, excerpts of readings on linguistic philosophy, constitutional law, physics (mechanics and nucleonics), vocabulary, and blank verse. Subjects were instructed to listen to these materials and to solve the various problems "in their heads." The "receptive/right" tape included: natural environmental sounds, symphonic music, electronically synthesized sounds suggesting depth and imagery, and contemplative sounds. Subjects were asked to simply listen to the material and to follow the sounds "in their minds."

Immediately after listening to a tape, subjects were tested on a freeresponse GESP task. Half of our hypothesis was confirmed: subjects in the action/left group scored very poorly on the psi task; in fact, they performed significantly *below* chance ("psi missing"). However, the receptive/right group exhibited chance performance, rather than good psi-hitting as predicted. We are continuing this line of research with a slightly altered receptive/right tape; perhaps its original contents were not quite appropriate.

A second experiment, performed in our laboratory by Ken Andrew (2), yielded much more encouraging results. The experiment was identical to the one just described, but the psi task involved psychokinesis (PK) rather than GESP. While listening to the tapes, subjects attempted to influence the activity of a random number generator by nonphysical means—to have the random generator stop in a desired position by simply "willing" it to do so. In line with our hypothesis, Andrew found significant above-chance scoring in the receptive/right group, significant below-chance scoring in the action/left group, and a significant difference between the two groups.

The sixth characteristic of the psi-conducive state is an altered view of the nature of the world.

LeShan (16) has recently proposed that mediums (exceptionally reliable psychics), mystics, and modern theoretical physicists all agree that there are two general ways of conceptualizing and experiencing the world. He uses the term "sensory reality" to describe the way the world appears to most of us, most of the time. According to this ordinary world view: (a) we emphasize the individuality and uniqueness of things; (b) we conceptualize and experience time as a very real, unidirectional flow; (c) direct sensory experience is the only means of acquiring valid information about the world; and (d) "good" and "evil" exist and are important concepts. For one who espouses fully such a world view (not only intellectually, but experientially and emotionally as well), psi is impossible. However, there is another way to conceptualize and experience "reality"-a non-ordinary way described by mediums, elaborated in the literature of the mystical tradition for centuries, and (much more recently) described by Einsteinian physicists: LeShan's "clairvoyant reality." Those who hold this world view conceptualize and experience "reality" in a very different way: (a) the unity and interrelationships of "things" are emphasized; (b) time is illusory and one's time concept and time experience change; (c) one's epistemology is altered-there are ways of communicating and knowing other than sensory experience and motor functioning; and (d) "good" and "evil" are illusory concepts and experiences. In the "clairvoyant reality," psi is quite possible, since the usual barriers of space and time no longer exist (29).

It is possible to simplify and translate some of the features of the "clairvoyant reality" into more manageable terms in order to indicate that these ideas are indeed testable. A number of the characteristics of the "clairvoyant reality" closely resemble variables which other investigators have shown to be important in successful psi performance. For example, the "altered epistemology" factor involves, in large part, a belief (cognitive and emotional) that psi can and will operate in a particular situation. Gertrude Schmeidler's findings showed that subjects who believe in the possibility of psi (both in a general sense and in themselves, in a particular situation) score significantly well in a variety of ESP tasks, while subjects who do not have such a belief score at or below chance (21). This general finding (known as the "sheep-goat effect") has since been replicated by a number of other investigators.* The "increased unitive experience" factor would appear to imply decreased ego concerns, increased caring for others, as well as increased emphasis on the unity and relationships of things. This implication is in agreement with findings from a number of experiments on the relation of psi to individual differences. Among these are

* Editor's note: See the article by Gertrude Schmeidler which begins on p. 133.

the findings that: (a) persons who perceive the world in a global or unitary manner evidence better psi scores than persons who perceive the world analytically (6); (b) persons who are less defensive perform better on psi tasks than do more defensive persons (13); and (c) psychic healing occurs best in a caring relationship (16). That an "altered time sense" is psiconducive is in agreement with a recent finding by Stanford and Neylon (23), as well as with the observation that time distortion occurs in many psi-conducive procedures (e.g., 11). Finally, the "'good' and 'evil' are illusory" factor implies suspension of interpretation and judgment. It is well known to parapsychologists and psychics alike that interpretation and judgment strongly interfere with good psi results.

LeShan (29) has developed a training program which appears to allow participants to successfully experience the "clairvoyant reality." Apparently as a result of participating in the program, participants' psychic abilities (in particular, psychic healing and clairvoyance) seem to be facilitated. The training program involves intellectual and meditative exercises designed to induce the "clairvoyant reality" conceptualizations and experiences.

Techniques which facilitate a shift from the "sensory reality" to the "clairvoyant reality" should also facilitate psi. Certain types of intellectual study, meditation and contemplation exercises, and suggestions (with and without hypnosis) would appear to be useful techniques. Certain psychedelic chemicals (especially LSD, mescaline, and psilocybin) may be useful in inducing a state of consciousness quite similar to that of the "clairvoyant reality." Anthropological, anecdotal, and clinical observations strongly suggest that these and other drugs may indeed be psi-conducive. Data collected under controlled experimental conditions are less convincing (15).

The final ingredient of the psi-conducive syndrome is that psi must be momentarily important.

Although this aspect has not been studied, anecdotal evidence suggests that psi is most likely to occur in cases in which it would aid in fulfilling some important *need* of someone concerned in the situation. Very frequently, spontaneous psi yields information which turns out to be *useful* to the percipient, the agent, or to someone else. Frequently, this information could only have been acquired paranormally. This factor is almost always absent in laboratory tests of psi, in which the psi test is frequently reduced to the status of a guessing game of trivial importance. Perhaps some minimal importance can be attached to the experimenter's or subject's wish to succeed—to do well on the psi task. The addition of such motivation to the psi experiment would require considerable ingenuity on the part of the investigator. Psychic healing is one of the few paradigms which readily comes to mind: here, a successful outcome is clearly important. The presence of strong feelings of empathy or strong emotional ties among the persons involved in the experiment may yield improved psi results.

I have described a hypothetical psi-conducive syndrome and have discussed each of its seven components in some detail. Although it is possible for the components to vary independently (especially under unusual circumstances or under some artificial conditions established in the laboratory), my suggestion is that the seven components usually vary together, are closely associated, and, hence, suggest the term "syndrome." Since the syndrome itself is hypothesized to be psi-conducive, any of its manifestations should facilitate the psi process. Several of these seven manifestations (or symptoms) have already been measured and have been positively related to good psi performance by various parapsychologists; others await further documentation. Similarly, any technique which induces a shift toward the syndrome should also facilitate psi. The technique most frequently employed in our laboratory is progressive muscular relaxation, along with suggestions of mental quietude. Other investigators have facilitated ESP through the use of hypnosis, meditative exercises, sensory withdrawal techniques, biofeedback, and other consciousness-altering devices.

REFERENCES

- Anand, B., G. Chhina, and B. Singh. "Some Aspects of Electroencephalographic Studies in Yogis." Electroencephalography and Clinical Neurophysiology 13, 1961, pp. 452-456.
- 2. Andrew, K. "Psychokinetic Influences on an Electromechanical Random Number Generator During Evocation of 'Left-hemispheric' vs. 'Right-hemispheric' Functioning." Paper presented at the Parapsychological Association meetings, Jamaica, New York, August 22, 1974.
- 3. Braud, L., and W. Braud. "Further Studies of Relaxation as a Psi-conducive State." Journal of the American Society for Psychical Research 68, 1974, pp. 229-245.
- Braud, W., and L. Braud. "Preliminary Explorations of Psi-conducive States: Progressive Muscular Relaxation." Journal of the American Society for Psychical Research 67, 1973, pp. 26-46.
- Budzynski, T. "Biofeedback Procedures in the Clinic." In N. Miller et al. (Eds.) Biofeedback and Self-control, 1973. Chicago: Aldine, 1974.
- Buzby, D. "Precognition and a Test of Sensory Perception." Journal of Parapsychology 31, 1967, pp. 135-142.
- 7. Charlesworth, E. "Psi and the Imaginary Dream." Paper presented at the Parapsychological Association meetings, Jamaica, New York, August 23, 1974.
- Beikman, A. "Bimodal Consciousness." Archives of General Psychiatry 25, 1971, pp. 481-489.
- 9. Honorton, C. "State of Awareness Factors in Psi Activation." Journal of the American Society for Psychical Research 68, 1974, pp. 246-256.
- Honorton, C., R. Davidson, and P. Bindler. "Feedback-augmented EEG Alpha, Shifts in Subjective State, and ESP Card-guessing Performance." Journal of the American Society for Psychical Research 65, 1971, pp. 308-325.
- 11. Honorton, C., and S. Harper. "Psi-mediated Imagery and Ideation in an Experimental Procedure for Regulating Perceptual Input." Journal of the American Society for Psychical Research 68, 1974, pp. 156-168.
- 12. Jacobson, E. Progressive Relaxation (2nd ed.). Chicago: University of Chicago Press, 1938.
- Johnson, M., and B. Kanthamani. "The Defense Mechanism Test as a Predictor of ESP Scoring Direction." Journal of Parapsychology 31, 1967, pp. 99-110.

- 14. Kasamatsu, A., and T. Hirai. "An Electroencephalographic Study of Zen Meditation (Zazen)." In C. Tart (Ed.) Altered States of Consciousness. New York: Wiley, 1969.
- Krippner, S., and R. Davidson. "Paranormal Events Occurring During Chemically. induced Psychedelic Experience and Their Implications for Religion." Journal of Altered States of Consciousness 1, 1974, pp. 175-184.
- 16. LeShan, L. The Medium, the Mystic, and the Physicist. New York: Viking, 1974.
- 17. Luthe, W. "Autogenic Training: Method, Research and Application in Medicine." In C. Tart (Ed.) Altered States of Consciousness. New York: Wiley, 1969.
- 18. Ornstein, R. The Psychology of Consciousness. New York: Freeman, 1972.
- Otani, S. "Relations of Mental Set and Change of Skin Resistance to ESP Score." Journal of Parapsychology 19, 1955, pp. 164-170.
- 20. Prabhavananda, S., and C. Isherwood. How to Know God: The Yoga Aphorisms of Patanjali. New York: New American Library, 1953.
- 21. Schmeidler, G., and R. McConnell. ESP and Personality Patterns. New Haven: Yale University Press, 1958.
- 22. Stanford, R., and B. Mayer. "Relaxation as a Psi-conducive State: A Replication and Exploration of Parameters." Journal of the American Society for Psychical Research 68, 1974, pp. 182-191.
- 23. Stanford, R., and A. Neylon. "Experiential Factors Related to Free-response Clairvoyance Performance in a Sensory Uniformity Setting (Ganzfeld)." Paper presented at the Parapsychological Association meetings, Jamaica, New York, August 23, 1974.
- 24. Tart, C. "Psychedelic Experiences Associated with a Novel Hypnotic Procedure, Mutual Hypnosis." In C. Tart (Ed.) Altered States of Consciousness. New York: Wiley, 1969.
- Tart, C. "A Psychophysical Study of Out-of-the-body Experiences in a Selected Subject." Journal of the American Society for Psychical Research 62, 1968, pp. 3-27.
- Wallace, R. "Physiological Effects of Transcendental Meditation." Science 167, 1970, pp. 1751-1754.

