

Distant Healing

Daniel J. Benor, MD

Abstract

This article reviews 61 studies of distant healing, which is healing that is deliberately sent by one or more healers as an intent, wish, meditation, or prayer to a healee who may be in the healers' presence or may be far away. Distance, even thousands of miles, does not appear to limit the effects of healing.

Significant effects of distant healing are demonstrated randomized controlled trials in humans, animals, plants, bacteria, yeasts, cells in the laboratory, and DNA. Fascinating new insights about energy medicine and integrative care are suggested by these studies.

Noteworthy are 120 further randomized controlled studies of healing given with the healers' hands held on or near the body, again with many of these demonstrating highly significant effects, not included in this article.

While distant healing appears to contradict our ordinary sense of reality and the laws defined by conventional science, there are several theoretical paradigms that suggest explanations for healing.

Key words: spiritual healing, distant healing, research

Introduction

I define spiritual healing as the "systematic, purposeful intervention by one or more persons aiming to help another living being (person, animal, plant or other living system) by means of focused intention, hand contact, or passes to improve their condition. Spiritual healing is brought about without the use of conventional energetic, mechanical, or chemical interventions. Some healers attribute healing to God, Christ, other higher powers, spirits, universal or cosmic forces or energies; biological healing energies or forces residing in the healer; psychokinesis (mind over matter); or self-healing powers or energies latent in the healee. Psychological interventions are inevitably part of healing, but spiritual healing adds many dimensions to interpersonal factors (1, 2)."

This article reviews 61 studies of distant healing, which is healing that is deliberately sent by one or more healers as an intent, wish, meditation, or prayer to a healee who may be in the healers' presence or may be far away. Distance, even thousands of miles, does not appear to limit the effects of healing.

Distant healing lends itself well to double-blind studies. Healers need not have direct contact with healees. Researchers can randomize patients into treatment and control groups leaving patients, medical staff, and those assessing possible effects of distant healing blinded to who is being sent the distant healing.

It is impossible in a brief article to do justice to all of these studies. A few samples of the best randomized, double-blind, controlled studies will be taken from each category for discussion, with references to the remainder for those who are interested in exploring further. The references are available at , and a full annotated bibliography of touch, near, and distant healing is available in my new book, *Healing Research, Volume I* (1, 2). Included in *Healing Research* are rankings of studies according to standards of research design, execution, and reporting.

Distant healing for human physical problems

The two best studies in this category are for treatment of problems in a cardiac intensive care unit (CCU).

Randolph Byrd (3) explored effects of intercessory prayer by born-again Christians on 192 patients hospitalized on a CCU in California, compared with 201 in the control group. After signing an informed consent, patients were randomized into the two groups, and later checks showed that there were no significant differences between the groups on demographic or illness variables. Prayers were sent daily by three to seven Christians.

Byrd devised a severity of illness assessment, as none existed for patients in a CCU. Each intercessor was asked to pray daily for a rapid recovery and for prevention of complications and death, in addition to other areas of prayer they believed to be beneficial to the patient. Significantly fewer patients in the prayer group required intubation; ventilation ($p < 0.002$) or antibiotics ($p < 0.005$), had cardiopulmonary arrests ($p < 0.02$), developed pneumonia ($p < 0.03$) or required diuretics ($p < 0.05$). Despite the differences between groups, the mean times in CCU and duration's of hospitalization between groups were nearly identical.

As Byrd notes, some of the patients in the control group may have had outsiders praying for them, which presumably would have reduced the differences between groups. If this is the case, the results are even more impressive.

In a replicating study, William S. Harris and colleagues (4) studied the effects of intercessory prayer in consecutively admitted patients on a CCU at the Mid America Heart Institute (MAHI), Kansas City, MO. There were 466 in the prayer group and 524 in the control group. Again, no significant initial differences were noted in comorbid conditions, age, or sex between the groups. Neither patients nor staff knew the study was being done, and therefore informed consent was not obtained.

Intercessors were recruited from the local community if they agreed with the

statements: "I believe in God. I believe that He is personal and is concerned with individual lives. I further believe that He is responsive to prayers for healing made on behalf of the sick." Intercessors were randomly assigned to 15 teams, each with 5 members (total 75). Intercessors were 35% non-denominational, 27% Episcopalian, and the rest Protestant or Roman Catholic. Prayers commenced by at least one intercessor by the second day after admission to the CCU. Intercessors were requested to pray daily over the following 28 days for "a speedy recovery with no complications" and anything else that seemed appropriate to them. The 28 days covered the CCU patients' entire hospitalization in 95 percent of the cases.

New events during the CCU stay were assessed by an internist and three experienced cardiologists. As no standard scales exist for the assessment of CCU cardiac status or progress, the researchers developed two of their own, the first with weighted and the second with unweighted values for various events, procedures and new diagnoses. A third rating, the Hospital Course Score used in the study by Byrd, was recorded as well.

All assessments and data analyses were conducted blindly. On both the weighted and unweighted scales, the treated group showed significantly greater improvements (both at $p < 0.04$). No significant differences between groups were found in the Byrd hospital course scores, although there was a trend in favor of the E group. Interestingly, again no significant differences were noted between the two groups in duration of hospital stays.

While many people feel that there is a distinction between prayer healing and healing done outside of religious settings or frameworks there is no research as yet which would validate this view. Several studies have addressed this question, none of them providing clear results (5, 6).

A third excellent study was published by Fred Sicher, Elizabeth Targ, and colleagues (7) on effects of distant healing on AIDS at California Pacific Medical Center's Complementary Medicine Research Institute. This study focused on 40 volunteers who had advanced AIDS (8). Volunteers were solicited through local advertisements. Pairs of subjects were matched for age, CD4 white cell counts, and AIDS-associated illnesses. They were randomly assigned to receive either distant healing or no healing. All received standard medical care from their own doctors, at several different medical centers (9).

Distant healing was sent by 40 healers in various parts of the United States. All healers had at least five years' experience, including treatment of AIDS, and were accustomed to sending distant healing. Healers had only the first names and photographs of five of the subjects. They sent healing for an hour each day, six days per week, over a 10-week period. Healers were rotated randomly in weekly healee assignments, so that every healee had 10 different healers who sent healing over the course of their treatment. Healers' religious backgrounds included Christianity, Buddhism, Judaism, Native American and other Shamanic traditions, and healing

traditions included several modern-day healing schools.

After six months, a medical chart review was conducted by a doctor who was blind to treatment assignments. There were no significant differences between healing and control groups on demographic and study variables prior to the start of distant healing treatments. At six months following the initial assessment, those sent distant healing had significantly fewer AIDS-related illnesses ($p < 0.04$) and lower severity of illnesses ($p < 0.02$). Visits to doctors were less frequent ($p < 0.01$), as were hospitalizations ($p < 0.04$), and days in hospital ($p < 0.04$).

Mood was assessed on the Profile of Mood States (POMS). Again there was significantly more improvement in the prayer group ($p < 0.02$). A higher mean score (not significant) was found in the E group at baseline. This could have contributed to the greater improvement shown on this variable. CD4 counts and scores on other psychological assessments did not differ significantly between the two groups.

The authors point out that the overall improvements appear to indicate a global rather than a specific distant healing effect. They suggest that measures of viral load and activity of natural killer (NK) cells may be more useful measures of healing effects than CD4+ counts.

However, no comparisons between groups were made on the treatments used, administered by different doctors at different treatment centers. It is possible that there were significant differences between groups in these or in other unidentified variables, with the prayer group receiving medical treatment which gave them some advantage compared to that given to the control group (10).

Another significant aspect of the studies of Byrd, Harris et al, and Sicher et al is that they are published in respected, conventional American medical journals. Until recently, most medical journals would routinely reject articles on spiritual healing.

Other studies have shown effects of distant healing on back pain (11), arthritis (12), recuperation from surgery (13, 14), hypertension (15), anxiety (16), anticipatory nausea in chemotherapy (17), and self-esteem (18).

In a study of LeShan healing, independent judges are able to identify from healees' subjective reports when a distant healing treatment has occurred (19). Six healers trained by LeShan were used. A series of healings was scheduled for each of the 12 subjects. The first and the fifth healing for each person were present (healer and healee in the same room) and the remaining eight were distant (healer and healee separated by unspecified distances, all presumably in their own homes). A few healings were conducted over greater distances. Healers and healees were told that healings would be done at specific times of day scheduled by Goodrich. Unknown to them, half of the distant healings for each healee were scheduled at least an hour after

the participants expected them (nonsynchronously).

Healees reported such sensations as relaxation, drowsiness, heaviness, decreased anxiety, increased energy, and peacefulness. Sensations reported by healers included a more intense awareness of self and feelings of peacefulness.

Three judges who were blindly given healers' and healees' self-rating forms on their subjective experiences successfully identified whether the healings were synchronous or nonsynchronous (modest significance: $p < .005$). Goodrich, disclaiming recall for coding of data, also rated the forms and achieved significant results.

Beginning students of healing and healees both often question whether they are feeling something related to healing if they sense heat between the hands of a healer and the body of the healee, or whether they merely feel the natural heat of a warm hand. This doubting of one's own experience is even more marked with absent healings. It is most helpful to have the confirmation of Goodrich's thesis that such sensations are frequent enough and distinct enough to be reliably identified by healees and by independent judges who reviewed reports of the healees' perceptions.

No effects of distant healing were demonstrated in studies of asthma (20), hypertension (21), leukemia (design of study seriously flawed) (22), anxiety (23), depression (24, 25), self-esteem (26), in inadequately defined chronic problems (27), or in people who did not need healing (28). Though a study of distant healing in alcoholism showed no effects on drinking, there was a significantly lower dropout rate from treatment in the healing group (29).

Distant healing effects on physiological measurements

William Braud and colleagues showed that a healer could utilize feedback from measurements of healees' electrodermal responses to raise and lower skin resistance. Repeated experiments showed very high levels of significance (30, 31, 32, 33, 34, 35, 36). Negative effects were found when a Reiki healer was asked to send distant healing for 30-second intervals (37). I believe this was too short an interval for a healing effect to be demonstrated.

Janine Rebman and colleagues demonstrated that healers could produce significant effects on electrodermal responses, finger blood volume, and heart rate (38).

These studies confirm that measurable, highly significant distant healing effects can be produced repeatedly. They also suggest that healers' claims to produce relaxation are probably accurate, as electrodermal responses reflect relaxation.

Distant healing effects on animals

The best series of animal studies in the healing literature is on the waking of mice from anesthesia (39, 40, 41, 42, 43). Healers sent distant healing from across a room, sometimes from behind a one-way mirror, to one of a pair of mice that were

littermates who had been matched for gender and weight, and anesthetized in the same anesthetizing box. They were able to selectively waken the designated mice significantly more quickly than the control mice ($p < 0.02$ -.00003)

An interesting sidenote came from one of these studies. The researchers asked the healers to randomly alternate waking mice on either side of the table. The healers said they could only do this if there was at least a twenty-minute interval between wakings of successive mice. Otherwise, they warned, some of the distant healing effects from the previous waking would linger on that side of the table. If the next mouse was a control mouse, and if it were placed on the side where a mouse had been sent healing within less than a twenty-minute interval, a residual of the healing effect could influence that control mouse to waken more quickly.

The researchers were reluctant to spend so much time waiting between trials, so they kept one side of the table for healing for half of each series of mice, waited an appropriate interval, and then reversed the side for healing. In one series, they deliberately studied this alleged "linger" effect. Without allowing an interval between sending healing to one side of the table and placing control mice on that side of the table, they found that indeed the mice placed on that side of the table woke more quickly--even though healing was not being sent at that time to that side of the table.

Distant healing also ameliorated the development of amyloidosis (a collagen disease) experimentally induced in hamsters (44), slowed the growth of experimentally induced tumors in mice (45), and protected mice from effects of radiation (46).

One of the most intriguing studies of mice, indeed, the study with some of the most far-reaching implications in the healing literature, is that of Jerry Solfvin on malarial mice (47). Solfvin gave his laboratory workers two vials, one labeled "babesia" (babesia rhodanii are malarial organisms) and the other "non-babesia," for injecting two groups of mice. Each mouse was given a code number and injected with malaria from one of the vials. A slip of paper, on which the code number and "babesia" or "non-babesia" were recorded, was sealed in an opaque envelope, with only the designation of "babesia" or "non-babesia" written on the envelope. These were handed to another experimenter, who sealed them in yet another envelope, again recording "high" or "low" on the second envelope. Solfvin divided the "high" and "low" groups of envelopes into two piles, one designated to receive distant healing and the other as a control group. Thus, Solfvin had no way to know which mice were in which malarial group, and the laboratory workers had no way to know which mice were to receive distant healing.

In reality, the vials given to the handlers contained identical doses of malarial organisms, and Solfvin never contacted a healer to send distant healing to the mice so designated. The study was actually one of illness and healing expectancy effects.

In Experiment 1 there were three animal handlers. Two were "sheep" (believers in psychic phenomena and healing) and one was a "goat" (disbeliever). The mice handled by the sheep demonstrated random results. Those handled by the goat showed significant effects ($p < 0.021$) for illness and a trend towards significance ($p < 0.09$) for distant healing effect. Both of these effects were significantly in the opposite direction to that predicted in the study, but consistent with the expectations of the goat.

In Experiment 2 there were five animal handlers and the malaria was designated as either "high" or "low" babesia. There were significant healing expectancy effects in the direction of positive expectation ($p < 0.05$) in all groups and a marginal trend in the illness expectancy ($p < 0.05-.10$).

Solfvin notes:

This healing expectancy effect is definitely a parapsychological one in the sense that it cannot be entirely explained in terms of known sensory processes, since the target animals were not known by anyone until the end of the study. We have therefore produced a paranormal healing effect, or something that resembles a healing effect, in a well controlled laboratory study which cannot be attributed to a specific psychic healer or healing treatment. It must therefore be attributable to something else and that something else may be operating in other psychic healing situations as well.

In experimental studies of psychic healing treatments the experimenters may have reason to expect positive results. The healer may have performed well in pilot or screening trials, may have brought an impressive anecdotal case history of successful healings, or may make a strong personal impression on one of the experimental staff members. The results of the current study, modeled after this situation, suggest that the expectation structure may be an important contributor to the results, regardless of what the healer does.

Without anyone having full information about which mice were designated for distant healing, a healing effect was evident. Non-local consciousness, as "Super-ESP," is suggested by this study. More on this in the discussion, below.

If this study can be replicated with significant results, it will put in question every double-blind study ever done--as a possible effect of Super-ESP, or non-local experimenter effect.

Healers have reported that the apparent limits of time may be transcended in healing. Frans Snel and P. C. van der Sijde (48) set up an experiment to study this possibility. They ran a controlled study of distant healing for malaria in rats, where the healing was only sent at the end of the study. Modestly significant findings supported the possibility of backwards-in-time healing ($p < 0.02$).

Distant healing effects on plants

Plants make good experimental subjects. They are inexpensive, low maintenance, and require no elaborate permission forms (as human studies do).

You could easily test your own healing abilities with plants. Take three pots of the same size, filled with soil from the same source. Take three batches of seeds from the same packet. Large ones, such as corn seeds, are handy, as you can plant them with their pointy ends down, each to the same, measured depth. Place the pots where they will each get the same intensity and duration of light, and water them with measured, equal amounts of water. Send positive thoughts or prayers to the first, leave the middle one alone, and send negative thoughts to the third. After two weeks you may see easily-visible differences in the growth rates in each pot.

Formal studies have shown significant effects of distant healing with plants (49, 50, 51, 52, 53, 54).

Other studies showed no effects of distant healing on plants (55, 56). Each of these studies had problems in their designs that might explain the failures to demonstrate healing effects.

Distant healing effects on bacteria and yeasts

Distant healing produced significant effects on enhancing and retarding growth of bacteria (57, 58, 59) and yeasts (60, 61).

These studies suggest that healers may be able to slow or halt the progress of an infection by retarding the growth of infecting organisms.

Carroll Nash (62) explored effects of distant healing on bacteria that mutate between two forms, "lac negative" and "lac positive," showing that healing could selectively increase either form. If this is an effect on mutation, it provides encouragement to believe that healing might influence mutating cells, such as cancers, in the body. However, as Nash notes, an alternative hypothesis is that the distant healing selectively influenced the growth of one or the other form rather than influencing mutation rates.

The implications of this study are discussed below.

Distant healing effects on single-celled organisms

C. M. Pleass and Dean Dey (63) explored effects of mental intent on the motility of algae. In their first experiment they found highly significant effects ($p < 0.000000005$). In their second experiment, replicating the first, they found no significant effects.

It is not unusual in parapsychology to find this sort of difficulty in replications, and several other replications of (touch or near-the-body) healing studies have shown no

effects.

Distant healing effects on cells in the laboratory (in vitro)

William Braud and colleagues showed that healers could slow the rate of hemolysis - the bursting of red blood cells placed in dilute saline (64, 65).

The most likely mechanism for this effect is a strengthening of the cell wall of the red blood cells. If this is the case, it might explain some of the mechanisms for many healing effects. The cell wall is a very active transport system for moving fluid, chemicals, and molecules into and out of the cell. If healing can alter these gateways, it may enhance cellular functions and increase protection of the cell from negative influences.

Another possibility is that the cell wall may act as an antenna for receiving healing "messages."

Franz Snel also showed that distant healing could slow the rate of growth of cancer cells cultured in the laboratory (66).

Distant healing effects of DNA

Glen Rein and Rollin McCraty, at the HeartMath Institute, showed that distant healing could alter the rate of winding and unwinding of strands of DNA (67, 68).

The implications of these studies are far-reaching, indeed. First, this could be a mechanism for the action of healing within the body, since DNA controls many of the functions of cells in the body. Second, if healing intent can influence these complex molecules that control genetics, it is possible that intent could influence heredity and evolution (69). This may be a mechanism for the effects in Nash's study of bacterial mutation.

Discussion

While distant healing appears to contradict our ordinary sense of reality and the laws defined by conventional science, there are theoretical paradigms that appear to offer explanations for healing.

These studies of absent healing introduce Newtonian medicine to the action of mind from a distance, Ònonlocal consciousnessÓ as Larry Dossey terms it (70). This is consonant with the theories of modern physics, that postulate interactions between certain particles from any distance. These hypotheses have been supported by research (71, 72, 73, 74). This is also supported by a wealth of research in parapsychology, demonstrating that minds can interact through telepathy, that a person can obtain information about physical objects from a distance through clairvoyant perception, and that direct mental influence over physical objects is possible (75-77).

Distant healing and other non-local effects of energy medicine are acknowledged by several of the complementary therapies (78).

One would hope that the benefits of such an inexpensive intervention would appeal to those who are concerned over the high costs of medical care.

Distant healing research confirms the effects of prayer on health. This does not prove, however, that prayers within any particular religious framework are more effective than any other, or than secular distant healing.

Subjective experiences of healers and healees involved in distant healing further support reports of experiences with prayer in religious settings. Those involved with healing may have a personal sense of heightened spiritual awareness (79).

The issues raised by distant healing research are extremely complex. ISSSEEM is truly at the frontiers of science in exploring these borderlands between Newtonian and quantum worlds, between the realms of matter and of spirit, through the study of subtle energies and energy medicine (80).

References

1. Benor, Daniel J. *Healing Research: Volume I, Spiritual Healing: Scientific Validation of a Healing Revolution*, Southfield, MI: Vision Publications 2001. (Contains descriptions of healers, discussion of healing in the spectrum of parapsychological research, and light reviews of research on touch, near, and distant healing.)
2. Benor, Daniel J. *Healing Research: Volume I, Professional Supplement*, Southfield, MI: Vision Publications 2001. (Contains detailed summaries of controlled and descriptive studies of healing.)
3. Byrd, Randolph C. Positive therapeutic effects of intercessory prayer in a coronary care population, *Southern Medical Journal* 81 (1988) pp. 826-829.
4. Harris, William S. et al, A randomized, controlled trial of the effects of remote, intercessory prayer on outcomes in patients admitted to the coronary care unit, *Archives of Internal Medicine* 159 (1999), pp. 2273-2278.
5. O'Loire, Seán, An experimental study of the effects of distant, intercessory prayer on self-esteem, anxiety, and depression, *Alternative Therapies* 1997, 3(6), 38-53.
6. Spindrift, Inc. *The Spindrift Papers* (Century Plaza Building, Spindrift Inc. PO Box

452471, Ft. Lauderdale, FL 33345-2471] 1993.

7. Sicher, Fred; Targ, Elisabeth; Moore, Dan; Smith, Helene S, A randomized, double-blind study of the effects of distant healing in a population with advanced AIDS, *Subtle Energies*.

8. Category C-3, including CD4+ cell counts of less than 200 cells, a history of at least one AIDS-defining disease, and taking prophylactic treatment against *Pneumococcus carinii*.

9. Triple drug therapy (a protease inhibitor and two or more antiretroviral drugs) which has proven to decrease mortality from AIDS significantly.

10. In personal communication, Elisabeth Targ reports that a multi-center replication is planned that will include controls for any differences between treatments at the various centers.

11. Castronova, Jerri; Oleson, Terri: A comparison of supportive psychotherapy and laying-on-of-hands healing for chronic back pain patients, *Alternative Medicine*, 3 (1991), pp. 217-226.

12. Bucholtz, Randi Anderson, The use of Reiki therapy in the treatment of pain in rheumatoid arthritis, University of Wisconsin, Oshkosh: M.S. in Nursing-Family Nurse Practitioner 1996.

13. Bentwich, Zvi; Kreitler, S.; Pfeffermann; R.; Benor, D. J. - Effect of distant healing on recovery from surgery, Presentation at 2nd International Dead Sea Conference on the Anatomy of Well-Being, Tiberias, Israel 1993.

14. Green, William Michael, The Therapeutic Effects of Distant Intercessory Prayer and Patients' Enhanced Positive Expectations on Recovery Rates and Anxiety Levels of Hospitalized Neurosurgical Pituitary Patients: A Double Blind Study (Doctoral dissertation), San Francisco: California Institute of Integral Studies 1993.

15. Miller, Robert N. Study of remote mental healing, *Medical Hypotheses*, 8 (1982), pp. 481-490.

16. Green, William Michael, The Therapeutic Effects of Distant Intercessory Prayer and Patients' Enhanced Positive Expectations on Recovery Rates and Anxiety Levels of Hospitalized Neurosurgical Pituitary Patients: A Double Blind Study (Doctoral dissertation), San Francisco: California Institute of Integral Studies 1993.

17. Sodergren, Kathleen Anne, The Effect of Absorption and Social Closeness on Responses to Educational and Relaxation Therapies in Patients with Anticipatory Nausea and Vomiting During Cancer Chemotherapy (Master's thesis) Minneapolis:

University of Minnesota 1993.

18. Schutze, Barbara, Group counseling, with and without the addition of intercessory prayer, as a factor in self esteem, Proceedings of the 4th International Conference on Psychotronic Research, Sao Paulo, Brazil 1979, pp. 330-331.
19. Goodrich, Joyce, Healing and meditation: healing as a unitive experience. The LeShan work, American Society for Psychical Research Newsletter, 18 (1993), pp. 5.
20. Attevelt, J.T.M. Research into Paranormal Healing (Doctoral dissertation) State University of Utrecht, The Netherlands 1988.
21. Beutler, Jaap J; Attevelt, J.T.M. et al. Paranormal healing and hypertension, British Medical Journal, 296 (1998), pp. 1491-1494.
22. Collip, P. J. The efficacy of prayer: a triple blind study, Medical Times, 97 (1969), pp. 201-4.
23. O'Loaire, Seán, An experimental study of the effects of distant, intercessory prayer on self-esteem, anxiety, and depression, Alternative Therapies, 3 (1997), pp. 38-53.
24. Greyson, Bruce, Distance healing of patients with major depression, Journal of Scientific Exploration, 10 (1996), pp. 1-18.
25. O'Loaire, Seán, An experimental study of the effects of distant, intercessory prayer on self-esteem, anxiety, and depression, Alternative Therapies, 3 (1997), pp. 38-53.
26. O'Loaire, Seán, An experimental study of the effects of distant, intercessory prayer on self-esteem, anxiety, and depression, Alternative Therapies, 3 (1997), pp. 38-53.
27. Joyce, C. R. B.; Welldon, R. M. C. The objective efficacy of prayer: a double-blind clinical trial, Journal of Chronic Diseases, 18 (1965), pp. 367-77.
28. Winston, Shirley, Research in Psychic Healing: A Multivariate Experiment (Doctoral dissertation) Union Graduate School, Yellow Springs, OH 1975.
29. Walker, Scott et al, Intercessory prayer in the treatment of alcohol abuse and dependence: a pilot investigation, Alternative Therapies, 3 (1997), pp. 79-86.
30. Braud, William. Conformance behavior involving living systems, In: Roll, W.G. et. al (Eds), Research in Parapsychology 1978, Metuchen, NJ: Scarecrow 1979, 111-

115.

31. Braud, William; Schlitz, Marilyn, Psychokinetic influence on electrodermal activity, *Journal of Parapsychology*, 47 (1983), pp. 95-119.
32. Braud, William; Schlitz, Marilyn, Possible role of intuitive data sorting in electrodermal biological psychokinesis (bio-PK), *Research in Parapsychology* 1987, 1988, pp. 5-9.
33. Braud, William; Schlitz, Marilyn. A methodology for the objective study of transpersonal imagery, *Journal of Scientific Exploration*, 3 (1989), pp. 43-63.
34. Braud, William, et al. Further studies of the bio-PK effect: feedback, blocking, specificity; generality, *Research in Parapsychology* 1984, 1985.
35. Braud, William; Schlitz, Marilyn; Collins, John ; Klitch, Helen, Further studies of the bio-PK effects: Feedback, blocking, specificity;generality, *Research in Parapsychology* 1984, 1985.
36. Radin, D. et al, Remote mental influence of human electrodermal activity, *European J. Parapsychology*, 11 (1995), pp. 19-34.
37. Schlitz, Marilyn J.; Braud, William G. Reiki plus natural healing: An ethnographic;experimental study, *Psi Research* 1, 4 (1985), pp. 100-123 (Also In: Weiner, Debra; Radin, Dean (Eds), *Research in Parapsychology* 1985, Metuchen, NJ: Scarecrow 1986, pp. 17-18).
38. Rebman, Janine M.; Wezelman, Rens; Radin, Dean I. et al, Remote influence of human physiology by a ritual healing technique, *Subtle Energies*, 6 (1995), pp. 111-134.
-).
40. Watkins, Graham K.; Watkins, Anita. Possible PK influence on the resuscitation of anesthetized mice, *Journal of Parapsychology*, 35 (1971), pp. 257-272.
41. Watkins, G. K.; Watkins, A. M.; Wells, R. A. Further studies on the resuscitation of anesthetized mice, In: Roll, W. G.; Morris, R. L.; Morris, J. D. (Eds), *Research in Parapsychology* 1972, Metuchen, NJ: Scarecrow 1973, 157-159.
42. Wells, Roger; Klein, Judith, A replication of a Òpsychic healingÓ paradigm, *Journal of Parapsychology*, 36 (1972), pp. 144-147.
43. Wells, Roger; Watkins, Graham, Linger effects in several PK experiments, In: Morris, J. D.; Roll, W. G.; Morris, R. L. (Eds) *Research in Parapsychology* 1974,

Metuchen, NJ: Scarecrow 1975, 143-147.

ns; Hol, P. R. Psychokinesis experiments in casein induced amyloidosis of the hamster, *European Journal of Parapsychology*, 5 (1983), pp. 51-76.

45. Snel, Frans W. J. J.; van der Sijde, Peter C. The effect of paranormal healing on tumor growth, *Journal of Scientific Exploration*, 9 (1995), pp. 209-211.

46. Mizra, Dmitri G.; Kartsev, V. I., Mental influence on grey mice exposed to lethal doses of ionizing radiation (May; Vilenskaya, *Subtle Energies* 1992 (Translated abstract)

47. Solfvin, Gerald F. Psi expectancy effects in psychic healing studies with malarial mice, *European Journal of Parapsychology*, 4 (1982a), pp. 160-197.

48. Snel, F. W. J. J.; van der Sijde, P. C. The effect of retro-active distance healing on babesia rodhani (rodent malaria) in rats, *European Journal of Parapsychology*, 8 (1990-1991), pp. 123-130.

49. Barrington, Mary Rose, Bean growth promotion pilot experiment, *Proceedings of the Society for Psychical Research*, 56 (1982), pp. 302-304.

50. Barros, Alberto, et al. Methodology for research on psychokinetic influence over the growth of plants, *Psi Comunicacion*, 3 (1977), pp. 9-30. (Summary, translated from Spanish, from: *Parapsychology Abstracts International*, 1 (1984), 80, Abstr. No. 662). (Abstract only, very limited report)

51. MacDonald, R.; Dakin, H. S.; Hickman, J. L. Preliminary studies with three alleged Ôpsychic healers,Õ In: Morris, J. D.; Roll, W. G.; Morris, R. L (Eds), *Research in Parapsychology* 1976, Metuchen, NJ: Scarecrow 1977.

52. Nicholas, C. The effects of loving attention on plant growth, *New England Journal of Parapsychology*, 1 (1977), pp. 19-24.

53. Russell, Edward. *Report On Radionics: Science of the Future, The Science Which Can Cure Where Orthodox Medicine Fails*, Suffolk, England: Neville Spearman 1973.

54. Saklani, Alok, Psychokinetic effects on plant growth: further studies, In: Henkel, Linda A.; Palmer, John, *Research in Parapsychology* 1989, (1990), pp. 37- 41.

55. Bush, Anita M.; Geist, Charles R. Geophysical variables and behavior: LXX. Testing electromagnetic explanations for a possible psychokinetic effect of therapeutic touch on germinating corn seed, *Psychological Reports*, 70 (1992), pp. 891-896.

56. Solfvin, G. F. Studies of the effects of mental healing and expectations on the

growth of corn seedlings, *European Journal of Parapsychology*, 4 (1982b), pp. 287-323.

57. Leikam, W. C. A Pilot Study on the Psychic Influence of E. Coli Bacteria, Unpublished Manuscript 1981.

58. Nash, Carroll B. Psychokinetic control of bacterial growth, *Journal of the Society for Psychical Research*, 51 (1982), pp.217-221.

59. Rauscher, Elizabeth A.; Rubik, Beverly A. Human volitional effects on a model bacterial system, *Psi Research*, 2 (1983), pp. 38-48; also in: A. Effects on motility behavior and growth of salmonella typhimurium in the presence of a psychic subject, In: *Research in Parapsychology 1979*, Metuchen, NJ: Scarecrow 1980.

60. Haraldsson, E.; Thorsteinsson, T. Psychokinetic effects on yeast: an exploratory experiment, In: W.C. Roll; R.L. Morris; J.D. Morris, (Eds.), *Research in Parapsychology*, 1972, Metuchen, NJ Scarecrow 1973, 20-21.

61. Tedder, W.; Monty, M. Exploration of long-distance PK: a conceptual replication of the influence on a biological system, In: Roll, W.G. et al. (Eds), *Research in Parapsychology 1980*, Metuchen, NJ: Scarecrow 1981. 90-93.

62. Nash, Carroll B. Test of psychokinetic control of bacterial mutation, *Journal of the American Society for Psychical Research*, 78 (1984), pp. 145-152.

63. Pleass, C. M.; Dey, Dean, Conditions that appear to favor extrasensory interactions between homo sapiens and microbes, *Journal of Scientific Exploration*, 4 (1990), pp. 213-231.

64. Braud, William; Davis, Gary; Wood, Robert, Experiments with Matthew Manning, *Journal of the Society for Psychical Research*, 50 (1979), pp. 199-223.

65. Braud, William G. Distant mental influence of rate of hemolysis of human red blood cells, In: Henkel, Linda A.; Berger, Rich E. (Eds), *Research in Parapsychology 1988*, Metuchen, NJ: Scarecrow 1989(a), 1-6. Also in: Braud, William G. Distant mental influence of rate of hemolysis of human red blood cells, *Journal of the American Society for Psychical Research*, 84 (1990), pp. 1-24.

66. Snel, Frans W. J. J. PK influence on malignant cell growth, *Research Letter of the University of Utrecht*, 10 (1980), pp. 19-27.

67. Rein, Glen; McCraty, Rollin: DNA as a detector of subtle energies, *Proceedings of the 4th Annual Conference of the International Society for the Study of Subtle Energy and Energy Medicine*, Boulder, CO 1994.

68. Rein, Glen; McCraty, Rollin: Structural changes in water and DNA associated with new physiologically measurable states, *Journal of Scientific Exploration*, 8 (1995), pp. 438-439 (reprinted with permission of the publishers, ERL 306, Stanford University, Palo Alto, CA 94305-4055, FAX 415 595 4466).
69. Other studies also point to this possibility. See Lamarckian genetics: theories from and evidence from the work of Luther Burbank, *Research in Parapsychology* 1987 Me Scarecrow 1988.
70. Dossey, Larry: *Healing Words: The Power of Prayer and the Practice of Medicine*, New York: Harper SanFrancisco 1993.
71. Capra, Fritjof, *The Tao of Physics*, Boulder, CO: Shambala 1975.
72. Jahn, Robert G., 'Out of this Aboriginal sensible muchness': Consciousness, information, and human health, *Journal of the American Society for Psychical Research*, 89 (1995), pp. 301-312.
73. Walker, Evan Harris: Consciousness and quantum theory. In: White, John (Ed), *Psychic Exploration* New York: Paragon 1974.
74. Wheeler, John A.: The universe as a home for man, *American Scientist* 1974, 62, 683-691.
75. Radin, Dean and Ferrari, D.: Effects of consciousness on the fall of dice: a meta-analysis, *J. Scientific Exploration* 1991, 5, 61-8376.
76. Nash, Carroll B. *Parapsychology: The Science of Psiology*, Springfield, IL: Charles C. Thomas 1986.
77. Jahn, Robert G.; Dunne, Brenda J.: *The Margins of Reality*, San Diego, CA and London: Harcourt, Brace Jovanovich 1987.
78. Benor, D. J. *Healing Research, Volume II: Consciousness, Bioenergy and Healing*, Southfield, MI: Vision Publications, in press
79. Benor, D. J. *Healing Research, Volume III - Science, Spirit and the Eternal Soul*, Southfield, MI: Vision Publications, in press
80. For further explorations of these and many related issues, see Benor, D. J. *Healing Research, Volume IV - A Synthesis of Recent Research*, Southfield, MI: Vision Publications, in press.

You may quote part or all of this article if you include the following credits and email contacts
Reprinted with permission of the author and publisher. Original publication: *Subtle Energies* 2000, 11(3), 249-2664. The International Society for the Study of Subtle Energies and Energy Medicine

(ISSSEEM). 1105 Ralston Rd., Ste. 100D, Arvada, CO 80004, (303) 425-4625 Fax (303) 425-4685
Chief Executive Officer: C. Penny Hiernu www.issseem.org ISSSEEM@compuserve.com
Daniel J. Benor, M.D. P.O. Box 502 Medford, NJ 08055 www.WholisticHealingResearch.com
DB@WholisticHealingResearch.com