The recent explosion of opportunities and interest in learning to heal has not been accompanied by sufficiently convincing empirical data to show that healing is teachable. We explore selected examples of teaching modalities and outline their general ethos.

Five empirical criteria necessary to demonstrate teachability are outlined. We suggest that no research to date, including a previous claim by one of us (W.F.B.), has surmounted the difficult obstacles that need to be overcome to make such a claim. Some scientific and social implications of the teachability of healing are discussed.


INTRODUCTION
The last decade or so has seen a virtual explosion of interest and research into what is now commonly known as energy healing. By this time, it should be apparent that a reasonably dispassionate analysis of the evidence for this type of healing will result in at least some acceptance of its reality. The empirical evidence for the existence of the phenomenon is overwhelming to the point that denial of its possibility must stem from either an irrational a priori rejection or a refusal to examine the evidence.

There are currently peer-reviewed academic journals significantly devoted to the empirical and clinical applications of energy healing, as well as many compilations of past studies that assess the overall quality and types of research that have been done. Controlled laboratory studies include healing effects on everything from single cells to humans, and on psychological as well as physical maladies. And many of these healing effects have proven to be reproducible.

It is therefore undeniable that energy healing has taken place under controlled conditions. That is not to suggest, however, that all claims made by healers should be taken at face value, nor that all studies of healing published to date could withstand rigorous methodological scrutiny. We do suggest that in applying the maxim of orthodox science—that extraordinary claims require extraordinary evidence—there will be a core body of evidence for healing that is undeniable and unassailable.

Individuals with special and identifiable healing abilities are recognized today and probably have always been among us. Also with us today, and perhaps always a part of the human experience, are healing traditions passed on from master to novice. It is our experience that these methodologies share similar issues regarding the efficacy of teaching energy healing, as well as many compilations of past studies that are considered teachable. Although there are healers in both camps, it would appear self-evident that most persons practicing healing would claim to have been taught.

Among the many issues not adequately addressed by empirical standards are the correlates to both successful and unsuccessful healing experiments, the number and percentage of people naturally able to produce healing under experimental and clinical conditions, and whether healing itself can be taught. And, if healing can be taught, is there any compelling reason to study the features of the many and disparate means to healing instruction?

We would like to focus on these last questions. It is our contention that whether healing can be taught remains empirically unresolved. And while it is certainly true that many believe it to be so, and both of us are sympathetic to that possibility, it is also our assessment that the methodological difficulties associated with demonstrating teachability have not been adequately addressed. (A wide variety of fields in both the sciences and humanities share similar issues regarding the efficacy of teaching techniques in their fields. It is our experience that these methodological issues are rarely discussed.) We will outline those difficulties.

Aside from the empirical issues that need to be addressed, even healers themselves have been split on the question of whether the ability is simply innate or can be learned. For example, two healers who produced extraordinary results in the pioneering studies of Bernard Grad at McGill University, Oskar Estebany and Olga Worrell, felt that healing could not be developed by study. On the other hand, Bioenergy Healing (bioenergy healing being a generic term, we use here capital to refer to the method taught by Margaret and Mietek Wirkus), Johrei, Reiki, and therapeutic touch are examples of the many healing arts that are considered teachable. Although there are healers in both camps, it would appear self-evident that most persons practicing healing would claim to have been taught.

TEACHING GROUPS AND TECHNIQUES
Of major interest is the widespread proliferation of workshops, seminars, courses, and institutes that purport to teach healing. That so many are now in operation attests to the apparent widespread belief among participants that healing is teachable. A quick perusal of the internet reveals an astonishing array of alleged opportunities for instruction in self-healing and the healing of others. They range from well-known to obscure, from on-site training to training simply through supplied materials. Some are overtly spiritual, others secular. Some require an attenuation, others do not. Some claim that the practitioner is the
source of the healing energy, in others the source is presumed to be an outside energy that is channelled.

The sheer number and range of opportunities for instruction are so vast that they defy any sort of simple analysis, and it is not our intention to provide one here. What is important for our purposes, however, is to point out that demonstrably missing from these teaching modalities is any rigorous presentation of studies published in refereed journals supporting claims of their efficacy. And it would certainly be interesting to know whether the distinctions and differences portrayed by the various modalities are centrally important or are simply expressions of their history and tradition that are odd common mechanisms.

Selected Examples
Some examples might be helpful. One of us (D.G.M.) has received training in, and practiced, numerous healing arts. These include direct experience with (1) Bioenergy Healing, (2) Johrei, (3) Reiki, and indirect experience with (4) therapeutic touch (Table 1). The examples that follow are in part derived from those personal experiences, do not represent the official teaching of specific people or organizations, and are a representative sample of the great diversity of healing arts practiced and taught. They are simply intended to initiate discussion and illustration.

In each of these four examples, hands are engaged to accomplish the healing, either by direct touch or indirect proximity healing. Each has a community of faithful followers: in the case of Bioenergy Healing, numbering in the thousands, in the case of Johrei, numbering in the millions. Skill in all four is commonly acquired through the teaching of an experienced instructor. An attunement is required in two of the four. The energy source is considered to be the self in Bioenergy Healing and therapeutic touch, and other in Johrei and Reiki. Where the energy source is other, the practitioner is presumed to be a conduit or channel for an external energy source.

Presumably, the students in these various teaching modalities enter their respective learning regimens with an expectation that they will be successful in either learning to heal or in enhancing their already existing abilities. This belief is sufficiently strong that they trust the healing claims of the teacher, as well as the promise that with proper application of the technique, they too will follow in the path of former successful students.

The training experiences of these students are likely to have some commonalities. There will be some instruction in the history and lore of the particular practice, including the sharing of many anecdotes, and an emphasis during their study on learning through doing, with guided training in the techniques. During the training, students will be guided to “feel” the healing energy in themselves and others, and will learn to associate these feelings as an illustration of the success of the techniques or program of instruction.

Students will be made to feel somehow special or unique and reinforced by the simple fact that they have made the decision to partake in the training. Oftentimes the students will be encouraged to bond together as like-minded individuals who are perhaps more “sensitive” than the majority of the population. They may be told that the workshop itself is not so much designed to teach them something new as to get them to “remember” that which they have always known and somehow forgotten. The workshop/training will then be designed to “awaken” them to their true nature. And although competing techniques and teaching modalities will sometimes be acknowledged, there will be an articulation of the uniqueness of the particular method being taught.

Of course there will be variation in style. Sometimes there will be an emphasis on the founder and lineage from the “master” (eg, Johrei and Reiki). Yet regardless of the methods used, there likely will be some percentage who self-select out after the initial training, presumably because they were not drawn to the techniques, or received insufficient reinforcement after the training, or simply did not perceive sufficient personal gain to continue. Most who remain in practice or training will have perceived some personal gain, whether warranted or not. Some percentage of students will start to report anecdotal experiences of healing in themselves and others. The teachers of the techniques will embrace these apparently gifted students, and a halo effect is established that will engulf the other students. Within this halo effect, students with perhaps marginal healing ability may lose realistic assessment of their own abilities and identify with the purported abilities of those who appear to be gifted.

Although the apparently gifted students may be used to illustrate the efficacy of the training, it is certainly possible that the training process does no more than act as a means to select out preexisting natural healers who will serve a circular function of reinforcing the belief in the training techniques. We do not know if the distribution of healing talent in the general population approximates a normal curve distribution or whether students who are drawn to complete the training are those already at the higher end of that distribution. The selection of teachers, who are often certified to teach by a governing organization (eg, therapeutic touch) or well-established tradition (eg, Reiki), introduces issues that parallel the self-selection problem for students. We do not have empirical evidence justifying assumed capacities to provide instruction.

The problem is further compounded by the simple fact that there is no agreed upon measurement of the output of energy healing. That is, there is nothing comparable to measurements in physical systems (eg, voltage, amperage, mass) or even to commonly agreed upon indexes and scales in the social and behavioral sciences that operationally measure more abstract concepts (eg, socioeconomic status, self-esteem, depression). Indeed, it may even be possible that the commonly used terms energy healing or subtle energy are misnomers, in that “energy” may not even be involved.

And so, although we maintain that the evidence for the existence of energy healing is overwhelming, the evidence for its
teachability is seriously deficient. We are not trying to indi
cators, there has not been adequate testing to date. We
we suspect that it can; we are claiming that there is not sufficient
empirical evidence to decide (both authors have taught healing
techniques to various groups for a number of years).

CRITERIA FOR THE EMPIRICAL DEMONSTRATION
THAT HEALING CAN BE TAUGHT

To empirically resolve the question, at least five conditions or
concerns must be addressed:

1. The evidence must be collected under controlled, experi-
mental conditions. Simply put, anecdotes are interesting
and perhaps suggestive, but they are not sufficient. Follow-
ing established experimental protocol, it is preferred that
data analysis be performed by disinterested specialists.

2. There must be an empirically measurable effect of healing,
regardless of the subjects used. If the subjects are humans, it
is preferable that there be objective indicators (eg, blood
counts, tumor size), though the indicators could include
subjective reports of improved health and well-being, as long
as they are done under controlled experimental conditions.

3. These experiments must include a predesign and postdesign
to illustrate the effect of the training. Simply noting that
those who have completed the training have demonstrated
healing is insufficient to conclude that the healing was actu-
ally due to that training. As previously speculated, it may be
that there is a normal distribution of healing ability in the
general population, and people who self-select to attend the
workshop or training are those already at the higher end. If
the teaching techniques have validity, there should be dem-
strated improvement in healing ability. Perhaps it will be
found that certain teaching techniques are differentially suc-
cessful with varying levels of ability.

4. The experimental design must control for such factors as
practice effects and ordinary regression effects. If, for exam-
ple, healing ability simply improves with practice in a pre-
design and postdesign, it may be that the specific “special”
knowledge imparted during the training masks more mun-
dane processes. Similarly, if individuals who are naturally
less effective healers are selected to measure the efficacy of
training, ordinary regression to the mean might explain im-
provement upon training or replication.

5. Of course all of this implies some sort of control group
comparison. And here there is at least one more method-
ological problem that may seriously complicate healing re-
search. In a recently published paper involving tumor regres-
son of mammary adenocarcinoma in mice through energy
healing,12 there was a high percentage of remissions in the
control mice, explained as due to a resonant bonding of

AN ILLUSTRATION OF
METHODOLOGICAL SHORTCOMINGS

One of us (W.F.B.) published a paper in 2000 claiming, among
other things, that healing can be taught.5 In three of four exper-
iments reported, inexperienced, nonbelieving volunteers were
trained in a healing method partially developed by Bengston.13

Once trained, these volunteers were given laboratory mice that
had been injected with fatal doses of mammary adenocarci-
noma. Though these mice normally have 100% mortality within
one month subsequent to injection, all but four of 33 experi-
mental mice went through novel stages of remission to full life-
span cure. Among the conclusions of the paper was a claim that
the success of the experiments demonstrated that healing can be
taught.

In hindsight, now, it would appear that two out of five of our
standards outlined here had not been successfully met. The first
and second criteria, that the experiment be conducted in a con-
trolled setting and that there be some objective measurable out-
put, were clearly met. These experiments were conducted in two
independent conventional biology laboratories experienced in
these cancer models. The fact that most of the mice were cured
is preferable that there be objective indicators (eg, blood
counts, tumor size), though the indicators could include
subjective reports of improved health and well-being, as long
as they are done under controlled experimental conditions.

4. The experimental design must control for such factors as
practice effects and ordinary regression effects. If, for exam-
ple, healing ability simply improves with practice in a pre-
design and postdesign, it may be that the specific “special”
knowledge imparted during the training masks more mun-
dane processes. Similarly, if individuals who are naturally
less effective healers are selected to measure the efficacy of
training, ordinary regression to the mean might explain im-
provement upon training or replication.

5. Of course all of this implies some sort of control group
comparison. And here there is at least one more method-
ological problem that may seriously complicate healing re-
search. In a recently published paper involving tumor regres-
son of mammary adenocarcinoma in mice through energy
healing,12 there was a high percentage of remissions in the
control mice, explained as due to a resonant bonding of

AN ILLUSTRATION OF
METHODOLOGICAL SHORTCOMINGS

One of us (W.F.B.) published a paper in 2000 claiming, among
other things, that healing can be taught.5 In three of four exper-
iments reported, inexperienced, nonbelieving volunteers were
trained in a healing method partially developed by Bengston.13

Once trained, these volunteers were given laboratory mice that
had been injected with fatal doses of mammary adenocarci-
noma. Though these mice normally have 100% mortality within
one month subsequent to injection, all but four of 33 experi-
mental mice went through novel stages of remission to full life-
span cure. Among the conclusions of the paper was a claim that
the success of the experiments demonstrated that healing can be
taught.

In hindsight, now, it would appear that two out of five of our
standards outlined here had not been successfully met. The first
and second criteria, that the experiment be conducted in a con-
trolled setting and that there be some objective measurable out-
put, were clearly met. These experiments were conducted in two
independent conventional biology laboratories experienced in
these cancer models. The fact that most of the mice were cured
clearly indicates a real, measurable effect of treatment. It is also
likely that the fourth criterion, controlling for practice and re-
gression effects, was not a factor. That is, some of the volunteers
were used in two experiments, and they were equally successful
in both. Had regression effects been at play, replication might be
an issue.

But the standards of criteria three and five were not met. There
was no pretest/posttest of the healing ability of the volunteers
before training. It is possible, though perhaps not likely, that the
dozens of volunteers selected for inclusion were inadvertently cho-
osen with some unconscious recognition that they already pos-
sessed healing ability. Without a pretest, there is simply no way
to tell whether the techniques enhanced their ability.

The fifth criterion, controlling for resonance effects, poses the
most difficult problem. In these experiments, there was a curious
pattern of control mice remission that occurred when volunteers
came into proximity of those mice. In a later paper, this was
explained as a macroscopic resonant bonding wherein a treat-
ment given to one mouse resulted in a treatment to all mice.12

Simply put, if resonance is at work, then it is not known whether
each volunteer actually remitted their mice or whether any par-
ticular mouse remission was the result of a resonant linkage to
someone else with healing ability. To test whether each person
had actually learned to heal, each volunteer would have to have
been both pretested before training and then posttested in a way
to control for this resonance effect. Neither was done, and so the
claim of teachability by the authors was premature.
SOME IMPLICATIONS

Why is all this important? From a scientific perspective, the teachability of healing is an inherently interesting subject for study, which may yield answers to some of the more perplexing facets of energy healing. If healing can be taught, it will be worthwhile to study individuals before and after their training. For example, functional magnetic resonance imaging brain scans, electroencephalograms, and various neurophysiologic indicators pretraining and posttraining might yield insight into the correlates of energy healing in a way different from those that test already-established healers.

Socially, there are innumerable implications of the teachability of healing. To date, the many and highly varied healing arts have not had a profound impact on orthodox healthcare. Extraordinary healing, by which we mean healing with unanticipated efficacy in the curing of illness or the acceleration of the natural process of healing—if commonplace rather than highly exceptional—might have a profound effect. For extraordinary healing to become commonplace, it must be teachable or transferable.

Imagine if it were possible to develop in large numbers the abilities of those who have demonstrated extraordinary healing. Currently there is a crisis in the orthodox healthcare system, with its prohibitively high costs, excessive dependence on pharmaceutical interventions, compromising sequelae to many surgical interventions, and the too frequent ambiguous outcomes of behavioral interventions. Whether energy healing can augment, or even substitute, for many orthodox medical interventions becomes far more important if large numbers of practitioners can be effectively trained to practice extraordinary healing.

The most obvious means to this currently nontested and elusive instruction is to rigorously pursue it with healers who show evidence of extraordinary abilities and are receptive to efforts to have their techniques taught. The less obvious means lies in a comparative study of healing practices where the healing is presumed taught, and to determine whether a synthesis of key features leads to substantial improvement in efficacy over any one of the contributing arts. Behind the myriad healing arts and the rationales claimed for their efficacy may be common processes that could be developed and applied. Systematic inquiry into healing and its instruction is a rational endeavor that might reduce the burden of healthcare costs and provide a serious alternative medicine.14

We assume that there are common processes underlying the myriad of healing arts and rationales given for their presumed efficacy, and that scientific inquiry can bring into focus the "laws of healing" much as we now have "laws" of nature. No matter the approach, there will need to be increased methodological rigor.

REFERENCES


SUGGESTED READING

Izunome Associates USP. http://www.izunome.org/