

Double-Blind Controlled Experiments and the Orgone Energy Accumulator

by
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The placebo response is now believed to be far more pervasive than formally thought. As many as two-thirds of those taking an inert substance react positively, at least temporarily. In addition to taking “sugar pills” the placebo effect works under certain circumstances with phoney surgeries, specifically on the knee. Therefore, the claim that using a device like the orgone energy accumulator has an energetic response requires controlled experiments.

Controlled experiments are important but not sufficient. In addition, to the placebo response there is experimenter’s bias, evidence that proves that experimenters’ expectations influence experimental outcomes for both humans and, surprisingly, animals as well. It is for this reason that double-blind controlled clinical trials are generally seen as the “gold standard” in establishing definitively the efficacy of a medical treatment or substance.

Such experiments are extremely rare in the history of orgonomy. Though Wilhelm Reich did controlled experiments, his were never double-blinded. However, extensive experimentation has been done on the Farabloc, a fabric which looks like an orgone energy blanket. At least one of these experiments was double-blinded and meets the highest standards of scientific scrutiny. To the degree that the Farabloc is an orgone energy blanket, to that degree experiments supporting its effectiveness also provide compelling evidence for the biological effects of orgone energy devices.

Wilhelm Reich never used double-blind controlled experimentation. The treatment protocol was virtually unknown at the time of his experimental work with orgone energy. Double-blind only gradually came into greater and greater use following the scandal about the use of thalidomide in the early 1960s.

Reich’s focus was more about the discovery and the application of orgone energy than it was about working out all the detailed implications of his findings or in presenting them in ways that would meet current scientific rigor. Recall the passage in *Ether, God and Devil*:

Did Columbus discover New York, or Chicago, the fisheries in Maine, the plantations in the South, the great water works or the natural treasures on the West coast of America? He did not discover, did not build or work out all this in detail.

The discoverer of orgone energy and the orgasm formula has revealed, quoting Reich, “the coastal stretch from which everything else has developed.”

Reich did do a number of controlled experiments, beginning with those on the

bioelectrical basis for sexuality and anxiety. Here Reich compared the readings of someone at rest and when that person was tickled or otherwise stimulated. Also, the responses of different people were compared, and different experimental protocols examined. In his bion research, different solutions, unsterile versus sterile were compared, as were different forms of sterilization; also, Reich compared bions generated from organic material vs. inorganic material. The orgone energy accumulator (ORAC) temperature difference experiments involve controls, as do the experiments with electroscopic discharge rates inside and outside an accumulator. And perhaps, most important of all, the experiments with cancerous mice, described in *The Cancer Biopathy*, involved comparisons of the life-span of untreated control mice with mice treated in ORACs. But, again, none were double-blind: at best, those involving mice were “single-blind”—mice are not likely to suffer from (or benefit from) the placebo effect—, but those handling the mice knew which were being placed in ORACs, and may, as a result, handled them differently. There is a famous experiment in which students were told that a certain set of rats had been bred to be super-smart; this wasn’t true. Those rats subsequently ran mazes more quickly than did their identical comrades, who had been labeled “dull” to the students. But video-taping showed that the “smart” rats were handled more frequently than the “dull” ones; this plus possible timing errors more than likely accounted for their speed solving mazes.

The orgonomic literature since Reich’s time details numerous controlled experiments. Here is a list of some:

- various duplications of Reich’s orgone accumulator temperature difference experiments;
- water evaporation inside an ORAC and a dummy box;
- experiments with plants, often focusing on the sprouting of seeds;
- experiments involving cancerous mice;
- wound healing in mice using the DOR buster and the ORAC;
- and human body temperature experiments.

With one exception, none of these was double-blind. Still, it must be emphasized that the lack of double-blind protocols in the overwhelming majority of the experiments summarized in this list, does not mean that these experiments were useless; quite the contrary, many of them provide very strong evidence of the physical and biological effects of orgone energy devices. But do they **prove** their effects?

The literature both during Reich’s life and since includes numerous case-studies of the effects of the accumulator, and the anecdotal evidence that such studies provide is of importance as well. Indeed, an entire book recording cases has been written in Germany. In this context, one must note the tension that exists between a doctor as healer versus the doctor as an empirical scientist. In case studies, one cannot isolate the natural course of healing of the organism (so-called “endogenous healing”) and the possible placebo effect of medical treatment per se from the potential healing of properties of the medical DOR buster, the shooter, and the accumulator. As one scientist has suggested, all healing consists of the positive effects of the treatment *plus* the natural course of the healing process *plus* the placebo effect. The only way to determine that the benefits are due to the treatment itself is through controlled double-blind experiments.

At least one person who takes it upon himself to speak as an authority on orgonomic

science dismisses the need for double-blind experiments. Writing in the *Journal of Orgonomy*, Charles Konia states flatly that double-blind experiments “are not used in the orgonomic sciences because they are not necessary.” Such experimental protocols may be necessary in conventional scientific inquiry, but in the case of orgonomy “an essential requirement in functional research is the *state of emotional health* of the investigator.” And if the researcher is healthy then they will be immune to perceptual error or “characterological bias,” which would exclude the experimenter’s expectations and other sources of data distortion. In the case of conventional inquiry, presumably carried on by armored individuals, the presence of distorting factors (misperceptions, character flaws, etc) must be excluded to obtain valid results. Konia: “This situation is the exact opposite of the relationship between the healthy natural scientist and the process under investigation where the organ sensations of the scientist are, to a large extent, the tools of research.”

As for the last point, surely Konia is correct. The process of discovery in orgonomy does at times require orgonomic sensing, and with *certain* experiments perceptual responses will differ with the health of the observer. But I should think that the use of double-blind placebo controlled experimentation is less about discovery and more about confirmation once initial results lead to a promising hypothesis. Then one must confirm one’s findings, and what better way to do that than to rule out possible bias. Konia presupposes that everyone working in the orgonomic sciences is, *ipso facto*, healthy and thus free of bias. Wouldn’t that be nice, but sadly we have very good evidence that not all in orgonomy are healthy or free of prejudice.

There is one double-blind controlled experiment in orgonomy that is widely known; it was done by Stefan Müschenich with the assistance of Rainer Gebauer. Their research was submitted to the University of Marburg for their D. Psych. degrees, and later published as *Der Reichsche Orgonakkumulator* in 1987.

In *The Cancer Biopathy* Reich observed that “*body temperature rises in the accumulator as much as one degree centigrade (the rapidity and amount of increase varying from individual to individual).*” Müschenich/Gebauer set out to measure core body temperature, skin temperature, and heart rate, using careful double-blind procedures. In every case there was a statistically significant result, with a rise in core body temperature, an increase of skin temperature and an increase in heart rate; the last result was seen by the experimenters as unexpected, but nonetheless established. Subjects were also asked for their own impressions via a questionnaire; all but one of the subjects reported feeling “better” in the ORAC as opposed to the dummy box.

The only possible criticism of this highly important experiment is the low number of subjects, with a total of only fifteen. A follow up experiment involving 62 test subjects was carried out at the University of Vienna in 1991/1992 by Günter Hebenstreit, but unfortunately it did not measure core body temperature.

We now have at least one double-blind controlled experiment verifying one of Reich’s claims and noting an “anomaly” that traditional medical science would be hard-pressed to explain. But there is additional double-blind experimentation, *if* the marketed Farabloc is an

orgone energy accumulating device.

The Farabloc was developed in Germany by Frieder Karl Kempe, in an attempt to help his father who suffered from phantom limb pain following the amputation of his leg during the Second World War. Two aspects of the history that follows are worthy of interest, namely the roles of weather and of the Faraday cage: we know that Reich claimed a definite correlation of weather and measurable orgone energy phenomena, and we also know that Reich's use of the Faraday cage was instrumental in the development of the ORAC.

Kempe noted that his father's pain increased as low pressure approached. This observed correlation of pain and weather change is, of course, not new, going back at least to the time of Hippocrates. Kempe reasoned that the pain his father experienced had to do with the lack of skin covering the stump, and thus exposing it to electromagnetic fields that are otherwise shielded.

Here I need to interrupt this narrative to question Kempe's reasoning here. First, I don't need to remind you that many people who haven't lost limbs to amputation also report an increase in pain with the onslaught of bad weather. Second, why did Kempe associate bad weather with electromagnetic increase? Or is he thinking about possible electro-static activity? Apparently, the Farabloc shields both kinds of fields, but Kempe only mentions electromagnetic ones. Finally, there is the assumption that ordinary skin acts as a shield against electromagnetic fields. Does it?

Back to the narrative: if a lack of skin explained the increase of pain, or so Frieder Kempe reasoned, perhaps a shield that functioned like skin would decrease his father's agony. From the Farabloc website:

Frieder wondered if a "second skin" - the principle of a Faraday Cage - might shield sensitive tissue, calm damaged nerve ends and stimulate blood circulation.

This began what has become a 30-year personal odyssey. After studying engineering, Kempe began work on a prototype covering, which he tested on his father. By 1978, he'd developed a thin fabric cloth with interwoven metal fibers that significantly reduced his father's pain. He named the product Farabloc.

The Farabloc is, we are told, a "fabric cloth with interwoven metal fibers." In an article reporting on research on its effectiveness the fabric is described as "woven mesh of stainless steel and nylon thread... 9.5% of the fabric is made of steel wire, which consists of iron, nickel and chromium." This same article claims that the Farabloc has been shown to block high frequency and ultra high frequency electromagnetic fields. This provides some theoretical basis for explaining the healing potential of the Farabloc, and by extension the orgone energy accumulator: "Changing the balance of the electromagnetic field toward lower frequencies may suppress free radical formation by inhibition of iron-containing enzymes..."

The first controlled study of the Farabloc was funded by the Farabloc Development

Corporation and carried out in 1985 by Prof. G. L. Bach, M.D., Professor of Medicine/Rheumatology, University of Munich, Germany. In the study the material was wrapped around the entire body of the subject or in cases of phantom limb pain, just the exposed stump. Bach's report indicated that:

In a relatively broad range of disorders in 32 patients with phantom pain, the therapy resulted in 81.25% of the patients showing a good or very good improvement.... Similarly good were the results with arthrosis (85%), lumbar spinal column syndrome (86.7%) and other syndromes (79.4%). The results of the test on 12 patients with chronic polyarthritis are astonishing. In the tests 63.6% of the patients reported an improvement in their condition. This result is astonishing in view of the fact that chronic polyarthritis belongs to the inflammatory-rheumatic group of illnesses...

Though placebo controlled, this study was not double-blind; still the rate of positive results (in all but one of the tests) is greater than the 66% of people who may respond positively to a placebo, and thus quite important.

The Farabloc Corporation is located in Vancouver, British Columbia, and in 1990 the British Columbia Ministry of Health asked researchers at the University of British Columbia to conduct a controlled double-blind experiment to determine the Farabloc's efficacy in treatment of phantom limb pain. The Corporation cooperated and provided materials, both the genuine item and a placebo dummy cloth. From the study:

Farabloc is made of a series of ultrathin steel threads woven, in a specific pattern, into a linen fabric which can be sewn into a garment (e.g., a sleeve/glove, sock, vest) to be worn over the amputation site as soon as the pain is felt. It is based on the same principle as the "Faraday Cage" to block external magnetic influences. ...

For the purpose of this study, the manufacturer produced a placebo fabric, identical to Farabloc in color, thickness, and texture but without the wire mesh which is not visible. Garments were fashioned from each fabric as appropriate for the individual subject.

The most significant feature of this study was that it was double-blind. It involved a cross-over design; that is, subjects used both the dummy and the real fabric, with a "wash out" period in between, to control against carry-over. ("A period in a clinical study during which subjects receive no treatment for the indication under study and the effects of a previous treatment are eliminated..."). Pain relief was reported using the Visual Analogue Scale, a commonly employed measure of pain. A total of 34 subjects completed the trial and the results indicated that "the subjects reported significantly greater pain relief on the VAS scale when they were using the Farabloc garment as compared to their pretreatment, washout or placebo pain relief ratings."

Another study originating at the University of British Columbia, this one single-blind, looked at the Farabloc in diminishing delayed-onset muscle soreness. From the results:

Main Outcomes Measured: Perception of muscle pain, as measured by a visual analog scale (VAS), and strength, as measured by knee extensor torque (EST) with the Biodex dynamometer, were evaluated at 0, 24, 48, 72, and 96 hours. Serum inflammatory markers of muscle damage, including malondialdehyde, creatine phosphokinase, myoglobin, leukocytes, and neutrophils, were assayed at 0,2,6,24, and 48 hours.

Results: Repeated-measures analysis of variance was carried out for each of the seven variables to assess differences for fabric, order of treatment, time, and all combinations. Results of VAS and EST and levels of malondialdehyde, creatine phosphokinase, myoglobin, leukocytes, and neutrophils all showed a highly significant effect of Farabloc compared with placebo.

In short, the use of the Farabloc led to “reduced pain, [reduced] strength loss, and [fewer] serum markers of inflammation.”

The most recent study of the Farabloc addresses fibromyalgia. From the article in *Clinical Rheumatology*:

...we performed a phase 1, single-blind study of patients using Farabloc (F) or placebo (P) gowns for 8 h per night during the 20-day hospitalization and a phase 2, single-blind crossover study of patients using both F and P gowns randomly and alternatively switching after 10 of 21 days hospitalization ...The study involved randomly selected and blinded use of hospital gown 8 h per night of either F or P fabric. ...

Patients with fibromyalgia had less pain after sleeping in a gown made of Farabloc than with a placebo fabric. This suggests that Farabloc, an electromagnetic shielding fabric, has analgesic properties in fibromyalgia. Reduced pain observation is consistent with previous studies in phantom limb pain and delayed onset muscle pain. Limitations of this study include single blind design, small sample size, and in phase 2, a lack of washout period and a F/F group.

In sum, there is strong empirical evidence that the Farabloc is effective in reducing pain and inflammation. Assuming, based on its construction, that the Farabloc is an orgone energy accumulator, then evidence of its effectiveness is simultaneously further evidence of the real biological effects of the ORAC. But is it an *accumulating* device? We know or have good reason to believe that it is indeed a *blocking* device, but does it accumulate orgone energy? And of course, the same question could be asked of the orgone energy accumulator itself: is it really an accumulator of orgone or a shield against electromagnetic energy? Or both?

The idea that ORACs may be blocking or shielding or keeping something out rather than accumulating something within is not new. It was part of the dismissal by one of the scientists (Dr. Kurt Lion of MIT in 1952) engaged by the FDA of Reich’s electroscopic discharge experiments. But of course it is possible that an orgone energy accumulator both shields *and* accumulates. It would seem that the construction of an ORAC might very well give it the ability to shield or screen out high frequency and ultra high frequency electromagnetism. It is, after all,

a Faraday cage of a sort, but one covered with non-metallic material. If so—and this could easily be determined empirically—, then it is certainly possible that the healing properties of the ORAC might be due to *both* the benefits described in the Farabloc article (fewer free radicals, etc.) *and* the vegotonic benefits of being within a higher orgone energy field of the sort provided by the accumulator.

Does the Farabloc wrap function as an accumulating device? Its construction would seem to argue for this, given the metal running through the linen. One possible test of its role as an accumulator would be to see if a temperature difference could be detected between the Farabloc and a dummy cloth of similar construction. Until such time as an experiment of this sort may be performed, it is worth considering reasons why one would argue that the accumulator is indeed *adding something within*, even if it is also *screening something out*. Here are some reasons why I say that:

- the temperature difference experiment;
- the vacor tube experiments;
- the visual detection of energy within the ORAC;
- the double-blind experiment by Müschenich/Gebauer described above.

If you are not familiar with any of these factors, please ask me during the discussion. All suggest the addition of energy rather than the mere absence of an energy field.

In this article I have described the Farabloc, a device intended to shield out electromagnetic fields within a certain range. The description of this device would suggest that it is a weak orgone energy blanket. If this is so, then evidence supporting the healing properties of the Farabloc—specifically its ability to diminish pain and lessen inflammation—simultaneously provides the ORAC with empirical support that meets the highest standards of experimental protocol. In addition to its construction, if the Farabloc can be shown to have the thermal properties associated with the ORAC, this would argue for its being an orgone energy accumulating device. Also, the recent work on harmful effects of electromagnetic fields, might explain in part the healing properties of the orgone energy accumulator.