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Reply to "How Do Energy Psychology Modalities Work" by Debra Greene

By David Feinstein, PhD

First of all, I am flattered to have my published speculations over the past decade about the mechanisms involved in the strong outcomes produced by acupoint tapping protocols elevated into what Debra Greene graciously calls *The Feinstein Model* and describes as the theoretical model that is "the most widely accepted." Greene's subsequent challenges to that model, however, prompt me to offer some clarifications about what the model is and what it is not. While that will be the focus of my comments, I want to emphasize that even where Greene's criticisms can be countered, she raises some salient points in posing them. And she uses that discission to launch into a more substantial examination of several conceptual puzzles within energy psychology (EP) by bringing an *energy* perspective to each of them. I'll begin with assertions about the "Feinstein Model" that I feel warrant comment.

Four Disputed Assertions

"No Room" for a "Larger Energy Component."

While acknowledging that "biological-based contributions are extremely valuable," Greene suggests that one of the limitations of my model is that it

fails to account for the larger *energy* component of energy psychology modalities. . . . EP clinicians successfully integrate a variety of energy-based modalities into their practices, modalities that involve working with the chakra system, pranic energy, the aura, the biofield, and so forth. The Feinstein model has no room for these experiences or modalities.

Beneath the limitation that Greene is highlighting is the dilemma that theory-building for a scientifically-oriented psychological journal—the intended audience of both papers (Feinstein, 2015; 2019) cited by Greene in examining my model—requires that the components of the theory be empirically established. While audience does influence the language of a presentation, it is a leap to say that the model has "no room" for a "larger *energy* component." In fact, I opened the first paper (Feinstein, 2012) that presented the neurological model Green is criticizing with, "An obstacle to professional acceptance of the growing body of research supporting the efficacy of energy psychology is the vague use of the term 'energy' in the field's name and explanatory frameworks" (p. 59). That paper, "<u>What Does *Energy* Have to Do with Energy Psychology</u>?" was able—since it was published in an energy-friendly journal, *Energy*

Psychology—to squarely embed the biological components of the model into an energy framework:

This article explores whether the concept of "energy" is necessary to fully account for the observed clinical outcomes that follow "energy psychology" treatments. Evidence is presented that shifting 3 types of energy—electromagnetic signals, brain waves, and energy fields—gives energy psychology protocols their advantage in quickly changing longstanding patterns in the brain. (Feinstein, 2012, p. 59).

In subsequently orienting the model to explain the mechanisms of action in EP treatments to a more conventional scientific community, I found it to be both an interesting and a fruitful challenge to translate all my key concepts into an empirically-informed framework. Unlike many of the early accounts about why EP protocols are effective, I did not allow myself to rely on ancient healing traditions or invisible forces that could not be reliably detected by established scientific instruments. So Greene is correct that my model, as presented in the context of the papers she examined, "fails to account for the larger *energy* component of energy psychology modalities," but that is a strength within those contexts rather than a liability, nor does it leave no room for an energy framework. In a <u>recent paper</u> on energy healing for the journal *Advances in Mind-Body Medicine* (Eden & Feinstein, 2020), my wife, Donna Eden, and I noted: "Mainstream medicine tends to view processes and outcomes through the lens of physiology; energy medicine views them through the lens of energy. Both frameworks are valid. And they meet at the most fundamental level" (p. 29). Greene's attempt to articulate where they meet is a welcome contribution.

"The Feinstein model does not elucidate how electrical activation of the tissue collagen translates into new brain synapses."

While Greene is correct that the model does not accomplish this, it also does not attempt to accomplish it, nor does consensus exist on exactly how any psychotherapeutic intervention translates into new brain synapses. The model does, however, draw from two of the most viable neurological formulations of therapeutic change-integration theory and memory reconsolidation theory (both discussed in Feinstein, 2019)-and applies them to what we observe clinically within EP. The precise biochemical mechanisms at the level of brain synapses is being actively debated by neurologists advancing both theories, but they do not need to be elucidated for a model to be useful in explaining how EP protocols lead to therapeutic change. We already know enough for a practical theoretical formulation. We know, for instance, from fMRI, PET scans, and other imaging devices used during a 10-year research program at Harvard Medical School that stimulating certain acupuncture points reduces threat arousal in the amygdala and other limbic structures (Fang et al., 2009). And we know from memory reconsolidation theory that an emotionally potent experience, which does not match the related explanatory schema, chemically unlocks the synapses that maintain the schema, making it possible for the schema to be altered (Ecker et al., 2012). My portraval of the way EP protocols change the brain, while not attempting to map precise activity at the neuronal level, is consistent with these theories and observations.

The Model's Way of Accounting for the Speed of Clinical Improvement After Tapping Is Inadequate.

In Greene's assessment, "the sequential, step-by-step, neurotransmitter-based . . . process described by the [Feinstein] model is too slow to explain the instantaneous field-wide changes that have been documented with EP." I agree that if I had been able to introduce the notion of subtle "energy fields" in the papers cited by Greene, it would have been easier to account for the rapid system-wide changes often witnessed during EP sessions. However, such rapid

changes also occur in therapies that do not rely on energy interventions, and they are central in the reconsolidation process that is a primary component of my model. In fact, Ecker et al. (2012) use the markers established by neuroscientists to determine if reconsolidation has occurred. These markers include:

- A specified emotional reaction *abruptly* [emphasis added] can no longer be reactivated by cues and triggers that formerly did so or by other stressful situations.
- Symptoms of behavior, emotion, somatics, or thought that were expressions of the emotional reaction also disappear permanently.
- Non-recurrence of the emotional reaction and symptoms continues effortlessly and without counteractive or preventive measures of any kind. (Ecker et al., 2012, p. 19).

Noting that the process is rapid, wide-reaching, and permanent, Ecker et al. go so far as to claim that psychotherapy which is successful in changing deep emotional patterns *always* activates the reconsolidation process, whether wittingly or unwittingly. So the speed by which EP can reduce anxiety, depression, and other conditions may not be directly tied to acupoint stimulation but rather to the dynamics of reconsolidation. This is not, however, to in any way discount the fact that acupoint stimulation, and the signals it sends almost instantaneously to specific areas of the brain, are the *means* by which EP initiates the reconsolidation process. That EP accomplishes this more quickly and more reliably than other therapies is at the core of my model.

The Model Is Limited to Explaining the Treatment of Trauma.

Greene correctly notes that EP outcomes "go beyond trauma or fear [and can] improve sports performance, reduce food cravings, improve communication skills, facilitate weight loss, improve wellbeing, reduce physical pain . . . and help with insomnia." But she also says that "the Feinstein model is trauma dependent in that it requires the mental activation of traumatic experiences or fear based learnings." It is true that the early formulations of my model were applied to the treatment of PTSD and emphasized the Harvard finding that stimulating certain acupuncture points instantaneously reduces arousal in the limbic system. But equally central to the model is the role of a "mismatch" between a current experience and the internal schema that is trying to make sense of that experience. Neurologists call this a "prediction error" and recognize that it is an essential element for transforming or excising a mental model that is no longer adaptive. It certainly applies to trauma, but it is not limited to trauma. For instance, Greene mentions food cravings. Excessive food cravings are not necessarily trauma-based or fear-based, so I will use them as an example. When EP is applied to address the craving for a junk food, that food is brought to mind and the person begins to tap. After relevant aspects of the craving have been addressed, the craving consistently goes away. Subsequent fMRI studies show that regions of the brain that were originally activated by images of the food are no longer activated after the tapping (Stapleton et al., 2019).

This is explained in my model by the following sequence: 1) the tapping sends signals via the collagen in the body's connective tissue to the areas of the brain that were activated by the thoughts or images; 2) the signals reduce arousal in these brain areas; 3) the person recognizes that thoughts of the food are no longer producing a desire for the food – the *prediction error* that is the essential ingredient for the old schema to be revised; and 4) the synapses associating the food with cravings are unlocked and the more recent experience of being able to think about the food without craving it is reconsolidated into the person's cognitive system. Some version of this sequence occurs in many contexts within EP, whether trauma-related or otherwise.

The "Feinstein Model" in a Nutshell

I do appreciate Greene's bringing attention to the model and that I am being given an opportunity to offer these clarifications. I will next briefly present the basic tenets of the model, in its neurologically-focused rendition, by drawing from my most recent exploration of energy psychology (Feinstein, in press). Consistent with earlier formulations, the paper presents and lends support for the hypothesis that the improvements following acupoint tapping prove durable *because tapping protocols reconstruct the neural circuits that maintain maladaptive mental models*. While the research findings leading to this assertion are detailed in the longer paper, this is how they are summarized:

1. Tapping on acupoints causes a class of large proteins within skin cells to convert the mechanical stimulation into electrical signals that may be carried to remote areas of the body through the connective tissue. This transmission is nearly instantaneous due to the high concentration within the connective tissue of the semi-conductor collagen.

2. These signals may deactivate arousal in the amygdala and other areas of the limbic system.

3. Alternatively, they may increase activation in areas of the brain involved with executive function, enhancing such capacities as planning or managing stress.

4. The words or images the therapist asks the person to bring to mind during the tapping activate brain areas that govern the issues being addressed.

5. The brain areas that are aroused by the words and images seem to attract the signals generated by the tapping, resulting in the activating or deactivating signals finding their way to clinically salient neurological structures. This allows the therapist unusual precision in targeting interventions for desired outcomes.

6. When the signals, for instance, *reduce panic* while the image of a spider is being evoked in a person with a spider phobia, the neurological changes outlast the tapping because of a process involving the dismantling of existing mental models and replacing them with new or revised models.

7. This reconsolidation sequence is initiated when what is experienced is not what was expected—a process neurologists call a *prediction error*—such as when the image of the spider does not produce panic due to the simultaneous tapping. The no-fear experience created during the tapping, after sufficient repetition, becomes the new normal.

Observations from more than a hundred clinical trials and the few imaging studies that have been conducted to date (e.g., Di Rienzo et al., 2019; Stapleton et al., 2019) are consistent with this formulation. For it to be more persuasively verified, however, additional imaging studies are needed that show precisely how the signals generated by stimulating the acupoints used in energy psychology protocols interact with the brain regions involved in specific disorders.

Conclusion

Greene uses the limitations or perceived limitations in what she calls the "Feinstein model" as a springboard for going beyond the model's neurological focus as she takes a deep dive into an energy perspective. She turns to William Tiller's "psychoenergetic" model in addressing several puzzles about EP. In the briefest synopsis, Greene's take on Tiller's work suggests that an

"etheric body" acts as a "blueprint" for the physical. Meanwhile, the chakras, aura, and meridians act as energy and information "interfaces" between the physical and etheric bodies. As Greene acknowledges, Tiller isn't the only notable clinician or researcher to articulate a coherent energy-based model for explaining the phenomena she is addressing. But Tiller's credentials as a physicist with more than 250 conventional scientific publications, as a Professor Emeritus from Stanford University's School of Engineering, and as one of the leading scientific voices on the relationships among energy, consciousness, & matter make Greene's application of his model to EP an intriguing exploration.

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David Feinstein, Ph.D., is a clinical psychologist and a pioneer in developing innovative therapeutic approaches, leading to nine national awards for his books on consciousness and healing, including the *U.S.A. Book News* "Best Psychology/Mental Health Book" of 2007. He is a recipient of the *Marquis Who's Who* "Lifetime Achievement Award," has served on the faculties of The Johns Hopkins University School of Medicine and Antioch College and, with his wife Donna Eden, has built one of the world's largest organizations teaching the hands-on use of energy medicine.



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Response to Feinstein

Debra Greene, PhD

I am grateful for David Feinstein's gentle and generous response clarifying his model and critiquing my assessment of it. My initial preference in writing the article was to simply present Tiller's model as a compelling option, worth our consideration. But the Feinstein model was an important comparison point that several reviewers asked me to consider. I hope that I highlighted the many ways in which his model helps explain EP, and the gaps that remain in the space between his model and Tiller's subtle energy model.

As Feinstein pointed out, the requirement for empirical evidence can be limiting. *Empirical* comes from the Greek word for experience, *empiria*, and refers to evidence based on observation or experience. More specifically, it refers to information received by means of the senses, through observation, documentation and experimentation. For those of us who apprehend subtle energies, Tiller's model depicts components that are as real and tangible as what the biological based models depict; however, our "experience," received through our senses, often is not recognized as empirical. I would advocate that the scope of what counts as experience be broadened to include a greater array of information received by the senses.

Recent research by the Yale University COPE project is a good example of this. COPE stands for Control/Influence Over Perceptual Experiences. The project seeks participants who hear voices or see/feel things when others don't. In other words, when there is no apparent physical source. By seeking to learn from those with such "unempirical" experiences, the goal of the project is to understand the specific mechanisms by which some people are able to control or influence the voices or related perceptions. Those methods of influence may then be codified and taught to others who are not able to control their chaotic inner worlds and are under psychiatric care, empowering them with new therapeutic opportunities.

Objective and subjective data, given equal importance, help science to advance and can expand our options for healing and caring. It is my intention and hope that in this exchange, Feinstein and I have contributed something to that type of advancement when it comes to EP.

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