

Role of Mind in Designing a Meaningful Guided Imagery of Higher Power in Psychoneuroimmunology

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ABSTRACT

Effectiveness of a guided imagery for application as a psychotherapeutic modality in mind-body medicine, and the emerging discipline of psychoneuroimmunology, is postulated to be directly proportional to the meaningfulness of the imagery to engender hope and will to meet the challenges in health and healing. A guided imagery of higher power is postulated in light of our recent study on consciousness, in particular, by explaining how meaning arrives in a conscious experience of the imagery and how its cognitive-emotive energy can facilitate relaxation response in proportion to meditating skill on the meaning of the imagery. The guided imagery of higher power as a neuropsychological construct was taught in a continuing educational program, in "Neuropsychology of Spiritual Healing," seminars to healthcare professionals. Effectiveness of the guided imagery of higher power in engendering hope and will, and its relevance for application in a truly patient-physician pluralistic population was evaluated by a population of one hundred participants, as eighty-five percent, in response to a questionnaire. We propose to conduct a large scale clinical study on the imagery of higher power with hospital patients.

Key Words: consciousness, meaning, guided imagery of higher power, relaxation response, meditation

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Introduction

In mind-body medicine, and in the emerging clinical discipline of psychoneuroimmunology, (PNI) the role of mind is understood intuitively only. This is apparent from the fact that mind has remained as mysterious as its origin, the phenomenon of consciousness. PNI investigates the functional relationships among the nervous system, the neuroendocrine system and the immune system. The existence of this multidirectional communication pathway provides the experimental basis for the analysis of

behavioral effects on immune functions, as well as, defining the effects of immunological processes on behavior (Schedlowski and Tewes, 1999). While, interdisciplinary investigations have demonstrated that the nervous and immune systems have close functional interrelationships at several nodal interactions, we assert that the role of mind, as is implied in the term "psycho" in psychoneuroimmunology has remained unexplored.

Use of imagery is basic to mind-body therapeutics in order to elicit relaxation response,

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in general. The therapeutic value of an imagery can be defined in terms of relevance and effectiveness of the meaning it connotes. In current mind-body practices it is common to meditate on a randomly selected word, or a phrase with or without religious affiliations, or by simply moving one's finger up and down, while meditating. The process should take place in a quiet environment, a setting where one can be quiet, undisturbed, and in a comfortable position for at least fifteen to twenty minutes. Given this setting, there are only two essential steps: the silent repetition of a word, sound, phrase, or prayer, and the passive return back to the repetition whenever other thoughts intrude (Benson, 1985). We observe that the imagery comprising of a random word or phrase may elicit a marginal relaxation response, in comparison to an imagery that is purposefully meaningful in its relevance to the goals of psychotherapy. We contend that meditation essentially acts as a vehicle to concentrate on an imagery. If meditation is used by itself, it can evoke at best a transient calmness of mind. Therefore, meditation becomes as much effective in facilitating relaxation response as the consciousness of the meaningfulness of an imagery that is meditated upon. The significance of meaning is also evident as patients struggle with the physical aspects of their disease, or have other pain as well, such as pain related to mental and spiritual suffering, to an inability to engage the deeper questions of life. Patients may be asking questions such as the following: Why is this happening to me now? What will happen to me after I die? Will my family survive my loss? Will I be missed? Will I be remembered? Is there a God? If so, will God be there for me? Will I have time to finish my life's work? Victor Frankl (1984), a psychiatrist, wrote: *"Man is not destroyed by suffering; he is destroyed by suffering without meaning."* One of the challenges physicians face is to help people find meaning and acceptance in the midst of suffering and chronic illness. Medical ethicists have reminded us that religion and spirituality form the basis of meaning and purpose for many people (Foglio, 1988). The most common spiritual reassurances cited were beliefs that they would be in the loving presence of God or a higher power, that death was not the end but a passage, and that they would live on through their children and descendants (George, 1997).

Historically, the concept of imagery has gone through three developmental stages with

respect to its relevance in healing; 1. Random word or phrase, 2. An imagery of Higher Power for application in a truly pluralistic physician-patient setting, 3. A guided imagery of Higher Power that is epistemologically validated as an infinite source of benevolence for application in a pluralistic population (Husain, 2001). In the present study, we propose to design a meaningful guided imagery of Higher Power, as a source of infinite benevolence, based on our research in consciousness (Husain, 2015), in particular, by showing how meaning arises in a conscious experience based on Einstein's epistemology as defined below, as well as, in light of interdisciplinary advancements made in PNI. For example, Candace Pert, a former neuroscientist at the National Institute of Mental Health, has discovered that neuropeptides are the biochemical units of emotions each contributing in some way to a person's overall mood, or emotional tone (Wechsler, 1987). Einstein's epistemology claims that "the concepts which arise in thought and in our linguistic expressions logically are free creations of thought which cannot be derived inductively from sensory experiences" (Lenzen, 1949, p. 360). We postulate that the "psycho" component of the emerging field of PNI will be enhanced by the role of meaning in evoking a cognitive-emotive force exerted by emotions.

Meaning is central to man's existence. As analyzed by Crick and Koch (1998; p.104), "An important problem neglected by neuroscientists is the problem of meaning. The problem of meaning and how it arises is more difficult, since there is, as yet, not even an outline formulation of this problem in neural terms." It is by virtue of meaning in emotions, it is understood that once emotions occur they become powerful motivators of future behaviors. Mental health is maintained by emotional hygiene, and mental problems, to a large extent, reflect a breakdown of emotional order. Since emotions can dynamically have both beneficial and pathological consequences, cognitive-emotive energy so evoked can be positive or negative, depending upon the meaning in the emotions. The pioneering research and clinical studies regarding religious and spiritual concerns of patients, notably by Koenig (Meador and Koenig, 2000), Larson (Puchalski and Larson, 1998; 2000), and Post and Puchalski (2000), were favorable to a conceptual formulation of imagery of a Higher Power, however, without epistemological validation of the role of meaning, perhaps, due to the absence of a theory of



consciousness affording an ontological source of meaning. The proponents of complementary medicine postulated an imagery of a Higher Power, to meet the psychological need of humans to seek for help in the time of distress (Post and Puchalski, 2000) The imagery of Higher Power, as a common modality, was also intended for application in a truly pluralistic patient-therapist situation, to surmount wide variations found in cultural and religious beliefs and values. However, the intuitive formulation of the imagery of Higher Power did show some promise. For example, Alcoholics Anonymous (AA) invoked a Higher Power to help alcoholics recover from addiction. Those who participate in AA are more likely to remain abstinent after inpatient or outpatient treatment (Montgomery, Miller, and Tonigan, 1995)

In late nineteen nineties, we formulated a guided imagery by validating it using Einstein's epistemology, in light of our ongoing research in consciousness and how meaning arises in conscious experience. The imagery of a Higher Power was taught as a formal academic course in continuing education seminars entitled "Neuropsychology of Spiritual Healing," at the Cleveland State University (Husain, 2001). The participants who comprised of healthcare givers, nurses, counselors, psychotherapists, clergies, and the general public, were asked to evaluate effectiveness of the imagery, in response to a questionnaire. The participants comprising of five batches of twenty healthcare givers in each batch, reported they found the imagery highly effective, (eighty-five percent), on a scale of one to ten. The rating on the imagery of a Higher Power seems to play a meaningful role in the emerging discipline of PNI, as a necessary and sufficient neuropsychological complement to it.

Design of a Meaningful Guided Imagery of Higher Power

In psychotherapy and PNI, we postulate a meaningful guided imagery of Higher Power, based on our research on consciousness, in particular, by explaining how meaning is engendered in a conscious experience of imagery of Higher Power and how it is represented uniquely, independent of a natural language (Husain, 2015). According to our postulate of Unified Cognitive Field of Consciousness for engendering meaning in a conscious experience and its representation in a semantically

coextensive fashion, on one hand, and its core principle of equivalence between *cognitive-emotive energy* E , and neurosonemic energy of *meaning* m , of a given concept of the imagery, is described by the equation: $E = ms^2$, where 's' is the spontaneous speed of integration of multisensory information. A plausible substantiation of $E = ms^2$ seems to arrive from the cognitive kinematics of formation of higher cognitive concepts, for example, 'infinity,' which is defined to have no physical correlate in the finite universe, although the notion of infinity is virtually arrived at based on the actual sense experience of physical objects with finite magnitudes. For example, from an observation that every object in the universe is finite and hence is measurable, the mind by virtue of its reflective cognitive trait, not only can inquire whether there could be an entity which is immeasurable, but also epistemologically 'invents' the metaphysical concept of 'infinity,' essentially independent of the actual sense experience, according to Einstein's epistemology. We assert that validity of 'infinity' is evident from the fact that in spite of its truly metaphysical nature, it is universally accepted as part and parcel of hard core science.

Based on the cognitive kinematics of infinity, as above, we postulate that a guided imagery of Higher Power is well within the epistemological reach. From an observation that all known benevolent powers and energies in the universe are finite and hence subject to annihilation by the principle of entropy, the mind has the ontological capability to inquire whether there could be a power of infinite benevolence which defies the principle of entropy, and at the same time can create the imagery of a Higher Power as an infinite source of benevolence. The notion of imagery of Higher Power is epistemologically as valid as the notion of infinity. The imagery of Higher Power is postulated to defy entropy on the merit of being a byproduct of mind which is known to be the only self-referential and self-regulating phenomenon in nature, which is known to function at negative entropy.

How meaning arises in a conscious experience comprising an emotion

An imagery, in fact, is comprised of a conscious experience which is shown to acquire meaning from spontaneous integration of incoming multisensory information, based on the fact that each sensory avenue carries its specific semantic



potential. The multisensory information is known to be integrated in the superior colliculus in concert with the cerebral cortex (Stein *et al.*, 2000; Ghazanfar and Schroeder, 2006). It is well known that conscious experience is not formed in a physical brain (Orpwood, 2007), but as we have shown, on a field of epistemic faculty of consciousness which is defined by signals known as *nousons* which are capable of representing the meaning in a conscious experience in a semantically coextensive fashion, such that the meaning and the sign become identical, until meaning is conveyed using a natural language (Husain, 2015). This development enables the mind to understand the meaning of an imagery in terms of nouson, as a common medium of communication on the analogy of neuropeptides pervading the PNI network. We note, investigation of confluence between neurosonemic field and the informational field due to neuropeptides, will be a very significant advance in PNI.

A patient acquires the therapeutic effect from concentrating on the meaning of a guided imagery of Higher Power by rehearsing the respective cognitive effort involved in arriving at the meaning of the imagery. The deeper one concentrates on the meaning, the more effectively one experiences the healing effects of the imagery in evoking immunoregulation, such as, marked by faster movement of macrophages. In the case of the imagery of Higher Power, the meditator may maximize attaining relaxation response in proportion to how deeply one concentrates on the epistemological attributes of the imagery of Higher Power described as below.

Higher Power is a source of infinite benevolence.

Its benevolence is inexhaustible, and hence can be invoked by any meditator in full measure.

It is accessible at any time or place.

Discussion

Search for meaning has been central to human existence. In his research in psychotherapy, the Nobel Laureate Eric Kandel raised a fundamental question: "We now need to ask, how do the biological processes of the brain give rise to mental events, and how in turn do social factors modulate the biological structure of the brain?" (Kandel, 1998, p.464). Based on our research on

consciousness, as above, we can answer the above two-part query in terms of two contributions. One, we have shown how meaning arises as a result of integration of multisensory information by the interaction of the field of epistemic faculty of consciousness and the universal field of quantum-consciousness, resulting in noumenal concepts represented by nousons, independent of a language. Two, in psychotherapeutic interventions using the guided imagery of Higher Power, interaction between the minds of the patient and the physician or psychiatrist takes place in terms of noumenal concepts, which are supposed to be the common medium to cause neuronal modulation in the brain. The above two mechanisms, which may be found in detail in the publication (Husain, 2015), are briefly described in this study.

Neuropeptides and their receptors join the brain, glands, and immune system in a network of communication between brain and body, probably representing the biochemical substrate of emotion. The ongoing explosion in the recognized number of behavior-modifying chemicals present in brain has revolutionized the theoretical framework of neuroscience (Pert *et al.*, 1985; p.820) The insights evoked by imagery, we foresee, can be effectively transformed into a specific plan for attitudinal, emotional, and/or behavioral change, in particular, based on the fact that "The striking patterns of neuropeptide receptor distribution in mood-regulating areas of brain, as well as their role in mediating communication throughout the whole organism, makes neuropeptides the obvious candidates for the biochemical mediation of emotion." (Pert *et al.*, 1985; p.823).

The proposed guided imagery of Higher Power being independent of any religious belief or dogma, is applicable as a neuropsychological construct in a truly pluralistic patient-physician setting. It most economically obviates appointment of several chaplains, one for each religious group of patients. It brings a closer patient-physician spiritual relationship to help patients understand the meaning of what they are suffering from, the meaning of available resources for treatment, and in taking hold of themselves in the case of end of life situations. The imagery is easy to learn and practice by the patients themselves, at any time and at any place, after they are trained. This Interactive guided imagery of Higher Power is useful in the current era of managed care, where cost-effective mind/body



medicine, improved medical self-care, and briefer, yet deeper, more empowering approaches to health care are much welcomed and greatly valued by patients, providers, and insurers alike.

With the proposed epistemologically substantiated meaning in the proposed imagery of Higher Power, we propose to conduct large scale clinical studies with hospital patients.

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