## **Extended Abstract**

## The Effects of a Love-Wisdom Meditation on Urinary Catecholamines Excretion, Anxiety, Depression, and Kinesiology Levels in Participants Who Have a History of Sexual Abuse

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Love is the attraction exercised on each unit of consciousness by the center of the Universe in its course of taking shape. —Teilhard de Chardin

This study examines the effects of a love-wisdom meditation on the mind, body, and spirit. Experiencing "love" through an intentional love meditation was a motivating factor in the undertaking of this study. Intention and the mind-body-spirit connection are explored. The 32 subjects included in this study were men and women who had a history of sexual abuse. Subjects were volunteers from a Western North Carolina paper advertisement as well as from a local counseling agency. Subjects acted as participants and controls, and were tested three times: pre-control period, post-control/preintervention and post intervention. The control period was two weeks and the intervention was a daily meditation practice for three weeks. To evaluate the mind's reaction to the meditation practice, the Beck Anxiety Inventory and the Zung Selfrating Depression Scale were used, assessing anxiety and depression levels. To evaluate the body's reaction to the meditation practice, urinary catecholamines (dopamine, norepinephrine and epinephrine) were measured 2-3 hours after waking. To evaluate the spirit or "energy" of subjects, a kinesiologist using a Map of Consciousness inspired by the work of David Hawkins, M.D., assessed kinesiology levels. The love-wisdom meditation intervention yielded statistically significant results (p < .05), raising dopamine levels. Statistically significant improvements (p < .01) were also indicated for norepinephrine from the beginning of the control to the end of the meditation intervention such that norepinephrine was closer to the optimum/therapeutic levels. Findings also indicated statistically significant improvements (p < .01) in the Zung Self-Rating Depression Scale, lowering depression levels in participants. Anxiety levels were lowered due to the intervention, but not enough to be statistically significant. More subjects and subjects practicing the meditation longer than three weeks may have continued the trend of anxiety levels lowering. No significant differences were found between the control and the meditation intervention for epinephrine or creatinine. However, there was a significant decrease in epinephrine during the control period, followed by a non-significant increase toward the optimum/therapeutic range

during the intervention period. Additionally, the results provided statistically significant (p < .05) changes in kinesiology levels surprisingly decreasing during the control period, but increasing during the intervention period. However, kinesiology readings did not increase higher than their original levels. As with anxiety, more time practicing the meditation may have continued the significant increase in energy levels. More research is needed to understand the implications of this finding.

The **Review of Literature** chapter includes five categories. The first deals with energy, emotions, and the mind, and lays the groundwork for the mind-body connection and how it has proven to be a powerful healing agent. The second discusses in more depth the dynamic of our beliefs and thoughts, and how they affect our ability to access love more fully. The third focuses on meditation, and the ongoing themes of intention and love are explored in relationship to it. The physical changes that occur due to the practice of meditation are emphasized in the fourth category. In the fifth category, the scale of consciousness and kinesiology are explained.

In the remaining chapters, the love-wisdom meditation intervention and the results of this intervention are revealed and discussed. In **Research Methods**, the study preparation, subjects, and a detailed explanation of how the study was structured are discussed. In **Research Results**, we analyze the statistical tests utilized as well as the types of tests performed. In **Conclusions**, **Discussion**, and **Recomendations for Further Study**, the results are discussed.

Table I presents the means for each of the three psychological and energetic variables and Table II presents the means for each of the five biological variables. Figure 1 depicts dopamine levels in participants' baseline and pre- and post-test, in relation to the optimal range, 125-175, and therapeutic ranges, 200-500. These optimal and therapeutic ranges are reported according to the Neuroscience, Inc. lab for dopamine levels. As we can see, the baseline mean dopamine level of 75 fell much lower than the optimal or therapeutic ranges for dopamine. After the control period, participants' dopamine levels had risen only slightly to 87 at pre-test, still falling below the optimal and therapeutic ranges. After the meditation intervention, mean post-test dopamine levels rose to 113, much closer to the optimal and therapeutic levels of functioning.

Space limitations do not permit the reproduction here of the figures for the other seven variables. By observing the tables of data and the figures for each, and reading the research results before them, we can see that the meditation intervention did have a significant effect on dopamine levels, norepinephrine levels, and kinesiology levels. The intervention also demonstrated a significant trend towards a decline in depression that is worth noting. Anxiety levels decreased slightly as well, after post meditation intervention.

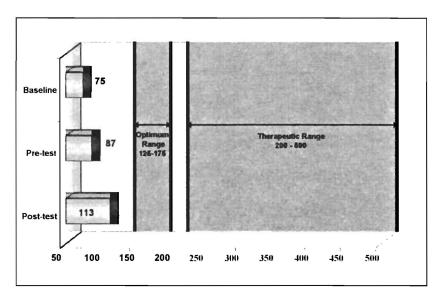


Figure 1. Dopamine Means

Means fe	Table I or the Psychological an	d Energetic Variables	3
Means:	A. Baseline	B. Pre-test	C. Post-test
Zung Depression	51	51	48
Beck Anxiety	18	18	17
Kinesiology	292	171	215
Means	A. Baseline	B. Pre-test Pre-test	C. Post-test
Means  Dopamine	A. Baseline 75	B. Pre-test Pre-test  87	C. Post-test
Dopamine	75	87	113
Dopamine Epinephrine	75 7.89	87 6.06	113 7.91

David Hawkins discusses the relationship between intention (belief) and love in his book, The Eye of the I. The question proposed to him is, "Are beliefs obstacles?" He states, "Yes and no. A belief is an operational substitute for the knowledge, which can be gained only by experience. For instance, a traveler believes that a country called China exists, based on faith and information. The belief gives sufficient basis for action. The traveler first hears about China, then reads information. At that point, the person 'knows about China' rather than knowing 'about' China. Once this occurs, the traveler needs no further beliefs or faith that China actually exists. Thus, successful action starts with plausible belief." If we substitute the word "love" for China, we can see the importance of taking love beyond belief to the level of energy or experience. We can see that love as a "state of being" must be experienced.

Three of the participants were male and the rest were female. Participants knew each other, but I took extra precaution to schedule them far apart, even on separate days, to ensure there were no accidental encounters. Due to the nature of the center where the testing was held (a private business with many different holistic practitioners) if the participants saw each other they would not know exactly why someone was coming to the Mountain Center. Participants were also given a number to assure their confidentiality. The number was for their urinalysis as well as written on their paper tests for identification. This was also the number used when their urinalysis was sent to the lab. Letters were also used beside the identification number to indicate the testing/time period. Participants were scheduled in the mornings from 8-12:30 depending on their waking time. Appointments were spaced out in 10-20 minute increments over two consecutive days. A third day was used as a backup in case of last-minute changes and to ensure a rescheduling option. An exception was made for one participant who worked third shift. She was scheduled at 7 pm due to the fact that she slept during the day.

At each time point, subjects were given a urine test for catecholamines, the Beck Anxiety Inventory, and the Zung Self-Rating Scale, and they signed their names to be assessed energetically by the kinesiologist. The kinesiologist, Araya Hansen, M.A. has a Masters in Kinesiology.

Love's correlation with these results has yet to be determined. I plan on a one-year follow-up with a questionnaire on love and the meditation practice to see if participants' feelings, thoughts, and experiences have changed in participants in this study towards accessing this wonderful experience called love.

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