



Report on Results of iRest Yoga Nidra
to Reduce Stress in Homeless Shelter Residents
with a History of Trauma

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Background

The Institute of Noetic Sciences (IONS), a non-profit organization in Northern California is collaborating with a leading provider of homeless services, the Committee on the Shelterless (COTS) in Petaluma, California, to develop, deliver, and test the effects of a mind-body wellness program for homeless adults. Mind-body practices have shown great promise in ameliorating symptoms of depression and anxiety, and for reducing stress and other symptoms of physical and mental illness. Funded by several private foundations, The “At Home Within” pilot program introduces mind-body practices for stress reduction and increasing self-regulation to the homeless adult population at COTS, most of whom have experienced significant trauma in their lives, and tests the results of participating in these programs. Since 2005 we have conducted eleven At Home Within-sponsored groups with over 200 participants, with very promising results.

In 2007, we were pleased to incorporate a new mind-body program that is showing particular promise for helping resolve issues related to past trauma into our At Home Within program. Developed by long-time meditation teacher and psychologist Richard Miller, Yoga Nidra is based on non-dual yogic teachings, and involves a standard nine-step practice to increase mindful awareness, to inquire into the nature of one’s mind and body, and to teach several skills for self-regulation through awareness practices.

We have tested the Yoga Nidra program with two groups, 26 participants total. In comparison to our other programs, which have included such practices as Meditation, Qi Gong, and Hatha Yoga. Facilitators have reported that Yoga Nidra was the best tolerated of any of the At Home Within interventions, with the greatest retention/completion rate, and that it appeared in general more accessible to participants. Below we describe in more detail the preliminary results of the Yoga Nidra program.

Preliminary Results

We compared participants scores prior to taking the Yoga Nidra course to their scores just after taking the Yoga Nidra course, using paired-samples t-tests. Each participant completed measures of stress, anxiety, depression, quality of life, and emotional well-being including the Perceived Stress Scale, the Kellner Symptom Questionnaire, The Quality of Life Scale, and the Positive and Negative Affect Schedule, both prior to and just after completing the Yoga Nidra course.

The table below shows that statistically significant improvements were observed across most of the variables we measured, all in the expected direction.

Variable	Average Scores Prior to Intervention	Average Scores Following Intervention	p value (< .05 is considered significant)
Perceived Stress	23.8	17.8	.000
Anxiety (Kellner)	33.2	30.5	.008
Hostility (Kellner)	30.2	27.4	.012
Depression (Kellner)	31.3	28.7	.010
Somatic Symptoms (Kellner)	34.1	31.6	.014
Negative Affect (PANAS)	39.5	34.7	.001
Fear (PANAS)	23.2	21.7	.016
Hostility (PANAS)	24.9	22.0	.017
Guilt (PANAS)	24.3	21.1	.029
Sadness (PANAS)	18.9	16.2	.005
Positive Affect (PANAS)	24.3	26.2	.207 (ns)
Serenity (PANAS)	7.5	9.2	.003
Quality of Life	50.6	54.7	.095 (ns trend)
Note: results not shown – no significant differences in shyness, surprise, joviality, or fatigue			

These results are particularly impressive because of the small sample size, which affords less statistical power and makes it more difficult to detect statistically significant differences. This implies that the changes observed between the pre- and post-measures were quite robust.

There are some limitations of this preliminary analysis. Because of this design, we were limited to only measuring people who had completed the post-measures, meaning that people who left the shelter or relapsed during the course are not included in the sample. Our results apply only to people who completed the four to six week course. This means that it is possible that the participants who completed the course did so because they were doing better in general than the people who did not complete the course.

In addition, we did not compare the changes in residents of the shelter who completed this course to the changes of residents of the shelter who did not complete the course. In other words, there was no control group in this study. It is possible that the participants would have improved over time regardless of whether or not they had engaged in this course.

However, when an intervention is in the beginning stages of being tested for efficacy in a new population, it is quite typical to start with an uncontrolled trial to assess feasibility of the intervention with the population and initial promise. Our results show that this intervention is feasible, and shows strong initial promise.

The next steps in this work would be to conduct a randomized controlled trial using a more conservative intent-to-treat analysis (in other words, assuming that people who drop out or relapse did not benefit beyond their last known scores).

Reports from Participants

Validated forced-choice questionnaires (e.g. true/false, or on a scale from 1-5) are powerful because they have been developed to accurately measure specific states of mind or symptoms that have been shown to correlate highly with a gold standard, such as a clinician interview, and because the relationships of variables as measured with these instruments to other variables are well-known. However, these instruments can be limited in assessing the more subtle aspects of people’s experiences, and often do not capture unique in-depth elements of changes people experience in response to interventions. In this project, we also ask open-ended qualitative questions to see if participating in the program changed, for example, participants views of themselves or their lives, or the ways they deal with stressors. Qualitative analysis of these items are underway, but a few examples of responses to the question “What do you do when you get angry or upset?” before participating in Yoga Nidra and after participating in Yoga Nidra follow:

Respondent	Prior to the Intervention	After the Intervention
650	Slam doors Go for a walk Punch holes in walls Suffer in silence Leave	Go for a walk Get quiet Go inside my head
639	Dwell on my mistakes Blame myself Withdraw Give up Loose self-confidence Get Sad	After I overcome my ego-tendencies towards passive/agressiveness and dwelling on the hurt, I make myself stay pesent and recognize and observe my feelilngs and either stay and work with them and maybe talk it over with whoever is involved in this misunderstanding... or else I just sit and breathe slowly, letting myself open for anything to come to mind that will help resolve my difficulty.
637	Shut down Say nothing, go into myself Self destruct - take drugs- kill pain	pray take deep breaths stay calm answer quietly or stay quiet

We also asked people who participated to evaluate the program. Here are some of their responses with respect to what helped them in the program:

“It helped me learning of my inner self and know that I CAN.”

“It helped me learn to listen to instruction, and with each week that went by I got more out of it.”

“ I learned to get my brain trained to go where I willed it.”

“It relaxed me. Calmed me down. Both the classes and the tapes made me more joyful and peaceful.”

“ It helped me to relax my mind.”

“ I liked listening to the meditation sessions. Being open to a new experience.”

“ I appreciated the mediation sessions. the relaxing environment and the visualization.”

“ I got more focused in concentration and had an easier time feeling relaxed.”

“Everything worked, don’t change a thing!”

“Lying down and learning to quiet my mind was great.”

“I learned more about my inner self.”

“ It helped me to feel better about myself.”

“I liked the meditation, stress reduction and moments of calmness.”

Negative evaluations of the program were almost exclusively with respect to location and surroundings – such as “ It would have been nice if the room were quieter” or “The area outside the room was loud.”

In response to being asked what could be improved, participants responded:

“MORE!”

“Would like more people to come to feel the way we felt- Enjoying it very much.”

“Would like the program to last longer.”

“4 weeks was not long enough. 6 weeks would be far better.”

“Please come back.”