Agnihotra and Mental Wellness

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Abstract

Agnihotra is an ancient Ayurvedic healing practice that utilizes the element of fire to increase mental and physical harmony. This pilot study examines the impact of Agnihotra on mental health and wellness.

Those in the Agnihotra and comparison groups exhibited greater mental wellness and less depression at post-test, but only the depression was significant. The Agnihotra group exhibited the most positive change, suggesting the findings may indicate change due to the intervention and not just due to chance.

While no causal relationships can be determined, the trend is that those in the *Agnihotra* group exhibited greater positive change, suggesting that *Agnihotra* may lead to more positive change over the same amount of time as doing another healing practice. Further analyses, ideally addressing this evaluation's limitations, are needed to confirm or deny the impact of the intervention. The results are promising and suggest more investigation is warranted.

Keywords: Agnihotra, Vedas, HOMA Therapy, Ayurvedic Techniques, Mental Health, Wellness, Depression

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Introduction

Mental illness is a prevalent societal issue associated with deleterious outcomes for individuals, families, and communities. Mental illness can include a number of different conditions (e.g., anxiety, depression, bipolar disorder, etc.) that range from mild to severe and that cause impairments across several domains of functioning (e.g., personal hygiene, work/school, social, etc.). In addition, associated difficulties can lead to additional problems such as homelessness, substance use, and an increase in crime, to name a few, which further puts individuals, families, and communities at risk for poor outcomes.

According to the National Survey on Drug Use and Health (NSDUH; SAMHSA, 2022), 57.8 million people (22.8% of the US population surveyed) experienced mental illness in 2021, with 14.1 million experiencing the greatest severity of difficulties. In addition, 19.4 million people were diagnosed with a mental illness and concurrent substance use disorder, which can be even more debilitating than those without this comorbidity. Further, the lifetime prevalence of psychiatric disorders, which vary widely depending on the population assessed, are high, ranging from 29% to 47% for any disorder (Cia, et al, 2018; Kessler, et al, 2005, Kessler, et al, 2007; Steel, et al, 2014), stressing the need and importance of interventions throughout the lifespan.

According to the NSDUH (SAMHSA, 2022), out of the 57.8 million people impacted by mental illness, 26.5 million people (9.1 million with severe difficulties) received treatment. However, 15.5 million people with mental illness reported needing services and not receiving them during this same year. Unmet mental health needs are often due to a host of factors, with poor access, insurance and transportation issues, inadequate treatments, and stigma often provided as common explanations. Although there are a host of interventions proven effective in treating mental illness despite these challenges, *Agnihotra* is an intervention that can combat many of the challenges other interventions may face.

Brief Description of Agnihotra

Agnihotra is an ancient technology revealed in the Vedic life sciences (Paranjpe, 1989) that can be practiced daily, by anyone, anywhere, with few supplies. Prior research indicates that the daily practice of Agnihotra induces a harmonizing resonance to heal the environment and self, through the element of fire (Paranjpe, 1989). This healing fire is prepared in a copper pyramid of particular dimensions, using dried cow dung and unsalted ghee, the only suitable organic fuel for Agnihotra. At the precise transitions of sunrise and sunset, a practitioner chants corresponding sunrise and sunset Agnihotra Mantra (see Figure 1), while making two offerings of whole brown rice mixed with ghee to the fire, after two utterances of "Swaaha." Additional and detailed information about Agnihotra can be found at: www.agnihotra.org and https://agnihotra.pl/en/.

{Figure 1}

The beneficial and healing effects of *Agnihotra* have been well established for decades (Berk & Johnson, 2022; Satsang, 1985, Vol VI, Nos 1, 6, 8, and 9). *Agnihotra* has been linked to improvements in mental and physical health, such as better cognitive functioning, reduced stress, and increased energy (Satsang, 1985, Vol VI, Nos 1, 6, 8, and 9). In addition, *Agnihotra* has also been found to have a positive impact on both prevention and intervention efforts (Satsang, 1985, Vol VIII, No 3), stressing the importance and potential of this practice. However, the paucity of research of *Agnihotra* is striking, especially as it relates to mental health and wellness.

Prior Research on Agnihotra

Scientific research on *Agnihotra* has been ongoing for many decades in various fields such as microbiology, biology, environmental sciences, agriculture, and chemistry, yet is still just scratching the surface on its full potential for healing and wellness (A review of these research activities can be found in Berk, 2020). Research of *Agnihotra* and the association with human health and wellness is still preliminary. Early studies of Agnihotra revealed the benefits of using this intervention to treat alcoholism and drug addiction (Golechha, Deshpande, Sethi, & Singh, 1987; Golechha, Sethi, Deshpande, & Rani, 1991), demonstrating its associations with reductions in substance use and dependence and improvements in wellness. However, the small sample sizes of these studies make it difficult to generalize the results to other populations limiting the utility of the findings and highlighting the need for additional and quantitative research. Four prior pilot studies investigating the impact of Agnihotra on psychology and physiology are highlighted below.

One study is described by Selvamurthy and colleagues (Selvamurthy, et al, 1989). This study was conducted by the Indian Army in the 1980s to find tools to help soldiers withstand the rigorous environmental conditions in the Himalayan mountains, where low temperatures and oxygen levels pose physical and mental risks.

The study examined physiological parameters such as heart rate, body temperature, galvanic skin resistance, blood pressure, heart rate, EEG and EKG. While the study had a limited sample size and study duration, the researchers noted the soldiers experienced mental tranquility during and up to 15 minutes after *Agnihotra*. Further, they observed an increase in galvanic skin resistance during *Agnihotra* (as compared to the control session), a shift in baseline of EEG, and an increase in alpha and theta waves, with a reduction of delta waves.

In a second study performed by a department of Universidad Finis Terrae in Santiago, Chile, results indicate that *Agnihotra* may lead to stress reduction. Two groups of students were selected before exam time, where higher stress levels were likely present. The control group performed Tai Chi, and the experimental group performed Tai Chi while, unbeknownst to them, *Agnihotra* was performed in the next room. The researchers measured stress levels by taking samples of the saliva and testing it for cortisol. The study found the experimental group experienced a greater reduction of cortisol levels as compared to the control group, indicating a possible greater reduction of stress for the experimental group than control group.

In another study that took place in Moscow (Yudin & Berk, 2013), two groups were invited to perform *Agnihotra* for five days. The first group performed only evening *Agnihotra*, while the second group performed both morning and evening *Agnihotra*. Dr. Yudin measured depression and anxiety through questionnaires and found that while both groups experienced a reduction in depression and anxiety, the reduction was greater for the group that performed *Agnihotra* twice a day.

In a follow-up study, Dr. Yudin measured the physiological effect of *Agnihotra* using an EEG (see Figure 2).

{Figure 2}

The EEG readings show, after *Agnihotra* (see Figure 3):

- a reduction of beta waves, which are higher frequency brainwave activity that could be an indicator for stress and anxiety;
- an increase in alpha waves (from 17.6% to 56.8%) which indicates reduction of stress and increased state of relaxation; and
- a 65% increase of theta waves, which indicates a state of meditation, creativity, intuition. {Figure 3}

The EEG readings (see Figures 2 and 3) provide an indication of *Agnihotra's* potential impact on reducing stress and anxiety.

Finally, in a study with HIV positive children in Mysore, Karnataka, India (see: Ramadass, et al, 2021), the regular practice of *Agnihotra* may have led to a reduction of viral load and decreased frequency of infections. In the study, ten children over the course of two years performed regular *Agnihotra* and ingested the ash remaining from the *Agnihotra* fire. The children were observed by medical practitioners, psychologists, and social workers, and the researchers measured HIV viral load and CD4 protein count. Over the course of two years, they observed a reduction in viral load, an increase in CD4 protein count, and a reduction of frequency of opportunistic infections of the children, as reported by physicians.

Purpose of the Current Study

Although the benefits and potential of *Agnihotra* have been well established for decades, especially amongst those who practice Agnihotra, research into the impact on mental health and wellness is needed. Bridging the gap between clinical practice and research is often a challenge and appears to be part of the issue preventing a more widespread dissemination of the benefits of a practice of *Agnihotra*. Operationalizing aspects of *Agnihotra*, and specifically those factors that lead to change, have been difficult to define, making quantitative research difficult. To date, much of the findings regarding *Agnihotra* and the impact on mental health have been limited to case studies, anecdotes, or research involving small groups. In addition, much of this research has been challenged by methodological issues (e.g., lack of a theoretical framework, poor study design, measures with validity issues, etc.) that often have a negative impact on research involving Ayurvedic practices (Gupta & Dhawan, 2022) and make it difficult to quantify results in a meaningful way that can be translated to evidence-based practice.

Our team is on a mission to not only spread the word about *Agnihotra*, but to also increase the quantitative research of *Agnihotra* and our understanding of the relationship to mental health and wellness. Although this study was plagued by some of the challenges other studies have faced, it was an important step in the initial phase of improving on what has already been done in this field. Previous findings and our experiences with *Agnihotra* in clinical settings, indicate the importance of this practice and the need for ongoing research into its benefits and ways to incorporate it into clinical practice.

The purpose of the current pilot study was to provide preliminary data about the impact of a daily practice of *Agnihotra* on symptoms of mental illness and markers for mental wellness. Specifically, we examined if 10 days of practicing *Agnihotra* was associated with a reduction in symptoms of depression and an increase in symptoms associated with mental health and wellness.

The current study aimed to answer the following questions: 1) Does an individual's wellbeing improve following regular practice of *Agnihotra*?: 1a) Is depression lower after practice of *Agnihotra*? 1b) Is mental wellness higher after practice of *Agnihotra*?; and 2) Are there specific symptoms that improve following practice of *Agnihotra*?: 2a) What symptoms of depression are lower after practice of *Agnihotra*? 2b) What symptoms of mental wellness are higher following practice of *Agnihotra*?

Method

Participants: The participants were drawn from a larger group of individuals participating in a documentary about *Agnihotra*. Only adults (age 18 and over) were included in the current study. Participants were divided into *Agnihotra* and comparison groups. Individuals were eligible if they: 1) expressed interest, 2) agreed to participate after learning of the protocols/requirements, and 3)

provided informed consent. Participants in the *Agnihotra* group were comprised of individuals invited from the community, directly or by 'word of mouth', to participate in a study of the impact of *Agnihotra*. Participants in the comparison group were an established group of individuals who have been practicing martial arts together for the last several years at the facility where the study was conducted; all of the individuals in this group participated in this study.

Procedures: This study was conducted as part of a documentary film by the first author, Gautham Bodepudi, examining the science and healing applications of *Agnihotra*. All participants were recruited by Dr. Henry Gregory, who has over 40 years of experience practicing *Agnihotra*, and who also conducted the orientation to the study and interviews throughout the study.

Potential participants for the *Agnihotra* and comparison groups were invited to separate information sessions for each group to learn more about the practice of *Agnihotra* and the proposed study. Those showing interest in and a desire to participate in the study were informed that this study would potentially be featured in the documentary. All participants were provided a detailed description of the study requirements and asked to sign audio/video release forms, in addition to a study consent form. Participants were informed that their participation in the study was voluntary, not required to participate in the documentary, and that they could withdraw at any time.

For the *Agnihotra* group, the study was conducted at the home of a family that have been longstanding practitioners of *Agnihotra* and that host *Agnihotra* community gatherings. For the comparison group, this study was facilitated at a community center providing martial arts and other services to children, adults, and families in an urban neighborhood, which is also where participants for the comparison group were recruited.

Individuals willing to participate in a group practice of *Agnihotra* were enrolled into an *Agnihotra* group. At the same time, community center members in a martial arts group were enrolled into a comparison group. All participants were asked to participate for 10 days and to attend an orientation, where they completed an entry interview and symptom measures. All participants were also asked to maintain a personal journal and to attend an exit session where they completed exit interviews and the same symptom measures completed at entry. In addition to these requirements, participants in the *Agnihotra* group were asked to attend a training for *Agnihotra* prior to orientation, to join a group text where they would send pictures to confirm performance of the fire practice, and to attend two workshops focused on *Agnihotra* during the 10 days of this study. For the *Agnihotra* group, participants were asked to practice *Agnihotra* at sunrise and sunset daily for the entire 10 days. The comparison group, which was comprised of an established group, met and practiced martial arts 3 times per week, or a total of 6 times, during the course of this 10 day study. Compensation was given to participants who completed all study requirements.

Study Design: A two group pre-test post-test research design was utilized to examine data regarding participants' symptoms of depression and mental wellness at the beginning and end of their participation in the study. Participants' post-test scores were compared to their pre-test scores to explore any potential changes in symptoms following participation in the study.

Intervention: The Agnihotra group met as a group for the first Agnihotra session to start the intervention, and then each participant practiced individually throughout the 10-day intervention. Each participant practiced Agnihotra at the sunrise and sunset times. Each participant prepared Agnihotra by: spreading ghee onto cow dung, arranging them within the inverted copper pyramid, preparing a rice offering by separating and removing broken pieces, and spreading the remaining whole brown rice grains with ghee. A few minutes before sunrise and sunset, the participants lit a piece of cow dung on fire and placed the burning cow dung in

the cow dung arrangement within the pyramid, to allow the fire to grow. At the precise time of sunrise and sunset, the participants recited the respective sunrise and sunset *Agnihotra* mantras (see Figure 1). The preparation time and offering of *Agnihotra* takes approximately 3 to 5 minutes. Participants were encouraged to meditate until the fire went out, which would typically last for about 3 to 7 minutes. The participants sent a picture of their *Agnihotra* fire to the group text to provide evidence of their participation in the *Agnihotra* practice at sunrise and sunset, respectively.

The comparison group performed a practice consisting of Tai Chi, Qi Gong, and meditation. They met twice a week as a group for 2 hours to practice Tai Chi, Qi Gong, and meditation, and were encouraged to practice individually throughout the week.

Measures: The Beck Depression Inventory (BDI; Beck, et al, 1961) was used to assess symptoms of depression. The BDI is one of the most widely used self-report instruments to measure the severity of depression and its psychometric properties are well established (Beck, Steer, & Garbin, 1988). It is a 21-item questionnaire with a severity rating scale ranging from 0-3, with 0 representing an absence of or little difficulty and 3 representing the highest score regarding difficulty. The severity of depression is then computed by adding all items and deriving a score, corresponding to the following categories: 0 - 10: normal ups and downs; 11-16: mild mood disturbance; 17-20: borderline clinical depression; 21-30: moderate depression; 31-40: severe depression; and 40+: extreme depression. Scores on the BDI range from 0-63.

The Mental Health and Wellness Interview (aka the Wellness Index) was designed by Dr. Henry Gregory and Gautham Bodepudi to assess symptoms of mental wellness. The Wellness Index is an 11-item self-scored survey that measures different domains of one's overall sense of wellness. Participants are asked to rate, on a scale of 1 to 10 (1 being the lowest and 10 the highest), their energy, mental clarity, restfulness of sleep, emotional competence, productivity, ability to manage stress, motivation, sense of purpose, sense of happiness, sense of fulfillment in relationships, and sense of belonging in community. Scores on this measure range from 11-110, with higher scores representing better wellness. There is currently no data regarding clinical cut-offs or psychometric properties for this measure.

Data Analytic Plan: Prior to conducting any analyses, the data were reviewed to identify and correct errors and outliers. Demographic data was examined and individual scores for each measure were recorded and tallied for each participant. Frequency and mean scores were computed to compare differences between pre-test and post-test BDI and Wellness Index scores. Bivariate analyses comparing demographic, BDI, and Wellness scores between the Agnihotra and comparison groups were conducted using independent samples t tests for continuous measures and chi-square tests for categorial measures.

To explore the research questions, non-parametric tests were used to compare scores based on the change between pre-test to post-test across groups while accounting for the small sample size, non-randomization to group, and a lack of normal distribution. Although data was reviewed for all participants, the only BDI and Wellness Index scores compared for significance were those for participants with both pre-test and post-test data (n=16 for the BDI, n=17 for the Wellness Index).

All statistical tests were two tailed, with p <.05 considered statistically significant, and conducted using SPSS 29 for IBM.

Participants/Demographics

Overall: As can be seen in Table 1, a total of 17 adults ranging in age from 20-74 years old were enrolled in this study. In general, the participants were predominantly male (65%), identified as African American (82%), and completed one or more years of a college education (53%).

{Table 1}

Group comparisons: As can be seen in Table 1, the groups differed on several factors, but many of these differences were not statistically significant. Participants in the *Agnihotra* group (n = 10) were older and completed more years of education than the comparison group (n = 7). Both groups had more male than female participants, and in general, the participants were African American.

Outcome Measures - BDI, Wellness Index, Change Scores

Overall: When considering the entire sample, the BDI scores ranged from 0 to 30 at pre-test and 0 to 21 at post-test. BDI scores fell within the normal range before and after the intervention and were lower at post-test. In addition, the scores on the Wellness Index were high at both time points and were highest at post-test. Change scores for the BDI and Wellness index indicated that participants endorsed less depression and greater mental wellness at post-test.

Group comparisons: Participants in the Agnihotra group scored within the mild depression range on the BDI at pre-test, and within the normal range at post-test. Participants in the comparison group scored within the normal range of depression at both pre- and post-test. Scores on the Wellness Index were high and increased from pre-test to post-test for both groups, with the Agnihotra group exhibiting the greatest increase. Scores of the change between pre-test to post-test were associated with lower depression and greater mental wellness, with the Agnihotra group showing the greatest change.

Research Question 1: Does an individuals' wellbeing improve following practice of *Agnihotra*?: a) Is depression lower after practice of *Agnihotra*? b) Is mental wellness higher after practice of *Agnihotra*?

The participants exhibited improvements in depression scores at post-test, and the differences were significantly different between groups (p = .023). Participants in the *Agnihotra* group, as seen in Table 1 and described previously, exhibited the greatest change with scores falling in the mild depression range at pre-test and in the normal range at post-test.

The results revealed higher mental wellness scores for both groups at the end of the study, with those in the *Agnihotra* group endorsing the greatest change between time points. However, these scores were not statistically significant between groups.

Research Question 2: Are there specific symptoms that improve following practice of *Agnihotra*?: a) What symptoms of depression are lower after practice of *Agnihotra*? b) What symptoms of mental wellness are higher following practice of *Agnihotra*?

Four items on the BDI were significantly different between groups at post-test. Specifically, feeling sad, feelings of being punished, suicidal thoughts, and difficulty making decisions, were all lower at post-test (i.e., these symptoms improved), with the *Agnihotra* group showing the greatest positive change. None of the wellness symptoms were significantly different between time points or groups.

Discussion

This pilot study aimed to increase our understanding of *Agnihotra* as it relates to mental health and wellness. Though several studies have been conducted to indicate the benefits of *Agnihotra* (Abhang, Manasi, & Moghe, 2015; Golechha, et al, 1987; Golechha, et al, 1991; Pathade & Abhang, 2014), this study is the first to examine *Agnihotra* as it relates to depression and wellness in adults.

The results of this study are promising and provide preliminary support for the use of *Agnihotra* to improve adult mental health. Consistent with previous research (Yudin & Berk, 2013; Selvamurthy, et al, 1989; Golechha, et al, 1987; Golechha, et al, 1991) and our expectations, *Agnihotra* was associated with improvements in mental health. Specifically, participants' depression scores were significantly lower at post-test and the *Agnihotra* group exhibited the greatest improvement. Given the prevalence and deleterious outcomes associated with depression (SAMHSA, 2022; McLaughlin, 2011; Surtees, et al, 2003), these findings are especially important.

Depression can be debilitating and has negative effects on mental and physical domains of functioning (Kessler, et al, 2003; Merikanges, et al, 2010; Mojtabai, 2001), highlighting the importance of identifying interventions that can target these aspects of functioning. Previous research of interventions used to treat depression highlight the importance of integrating the mind and body and treating the whole person (Burnett-Zeigler, et al, 2016). Previous research has shown that *Agnihotra* has an impact on individuals' mental and physical wellbeing (Yudin & Berk, 2013; Ramadass, et al, 2021; Berk & Johnson, 2022). The results suggest that *Agnihotra* may be an effective intervention for depression and can improve symptoms related to increased risk. In this study, *Agnihotra* was significantly associated with less: sadness, feelings of being punished, suicidal thoughts, and difficulties making decisions. These findings support the importance of additional research into the potential and utility of *Agnihotra* in improving mental illness.

The Wellness Index scores were high at pre-test and higher for both groups at post-test, but this was not statistically significant for either group. Without having information about the psychometric properties and clinical cut-offs it is difficult to interpret the findings other than as a trend. However, it is important to consider that the lack of a significant change observed for wellness may indicate that *Agnihotra* provides benefits similar to the effects of regular engagement in Ayurvedic or healing practices and journaling each day. The results of this study suggest that *Agnihotra* may be at least comparable to other practices and may be an effective adjunct to any treatment regimen. Further research is warranted to determine the specific ways *Agnihotra* impacts mental health and wellness.

Limitations of the Current Study

While the results of this study may be promising, there are several limitations that should be addressed in future studies. The sample size was too small to generalize the results to other samples of individuals and to draw any causal inferences. Using a pre-test post-test design and including a comparison group was an attempt to improve the ability to detect an effect at post-test, but not enough to improve the overall statistical power. Future studies should include higher numbers of participants and randomly assign them to intervention options. Without random selection it is hard to tell what extraneous factors could account for the findings.

Another limitation is that there was no control for prior experience, difficulties, or service use. Specifically, data was not collected about participants' past experiences, diagnoses, nor therapeutic services received. Not having this information in the current study prevented us from understanding if individuals were also similar on these factors and whether or not these factors were significantly associated with the outcomes.

It is also important to note that this study only included African American and non-Hispanic white participants. As a result, it is unclear if these findings would differ with a more diverse sample. Nevertheless, it is important to acknowledge that *Agnibotra* can be practiced with individuals from various backgrounds, therefore the impact of ethnicity may not be a significant factor.

Conclusions and Future Directions

The results highlight the importance of continuing to identify ways to improve the lives of individuals impacted by mental illness. Previous research has supported the utility of Ayurvedic practices on mental illness (Burnett-Zeigler, et al, 2016) and this study provides further evidence. Future research studies should be conducted to continue to identify the benefits and change agents related to *Agnihotra*, as well as how it measures up against other intervention efforts. Decades of research and findings on *Agnihotra* in various fields (Berk, 2019) such as psychology, physiology, microbiology, biology, environmental sciences, agriculture, and chemistry indicate that *Agnihotra* is deserving of rigorous, multi-disciplinary scientific inquiry.

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Figure 1 Mantras for *Agnihotra*

The sunrise Agnihotra Mantra.

Sooryaya Swaaha (first offering of rice, with right hand)

Sooryaya Idam Na Mama

Prajapataye Swaaha (second offering of rice, with right hand)

Prajapataye Idam Na Mama

The sunset Agnihotra Mantra:

Agnaye Swaaha (first offering of rice, with right hand)

Agnaye Idam Na Mama

Prajapataye Swaaha (second offering of rice, with right hand)

Prajapataye Idam Na Mama

While the true meaning of the *Agnihotra Mantra* lies in its underlying impact of the sound intonations, one can roughly translate them as follows:

Sunrise Agnihotra Mantra:

To the sun I am offering all.

Yet this offering is not mine.

To universal consciousness, I am offering all.

Yet this offering is not mine.

Sunset *Agnihotra Mantra*:

To Agni (of which fire is one expression) I am offering all.

Yet this offering is not mine.

To universal consciousness, I am offering all.

Yet this offering is not mine.

Figure 2
EEG Reading Before Agnihotra
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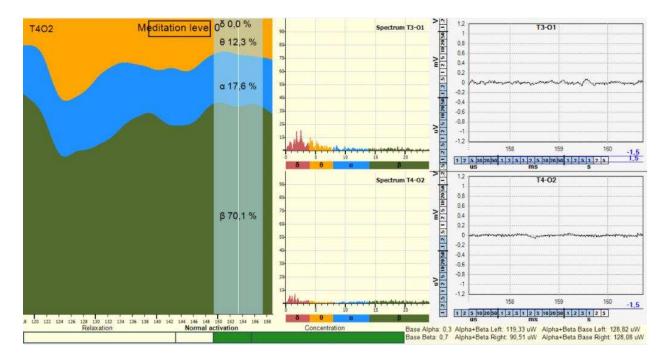


Figure 3
EEG Reading After Agnihotra
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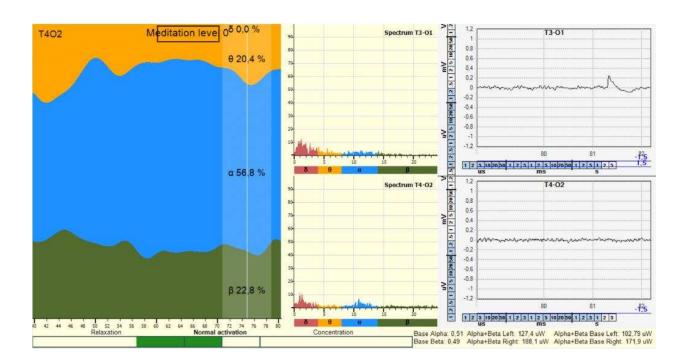


Table 1 Demographic and Clinical Characteristics of Participants

	Overall Group	Amihotna Cuono	Companison Crown
77 ' 1 1		Agnihotra Group	Comparison Group
Variable	N = 17	n = 10	n = 7
		· · · · · · · · · · · · · · · · ·	
Age in years, M (SD)*	48.24 (17.70)	55.80 (11.97)	37.43 (19.73)
	Range: 20–74 years	Range: 40-74	Range: 20-71
	old		
Male gender	65% (n = 11)	60% (n = 6)	71% (n = 5)
African American	82% (n = 14)	70% (n = 7)	100% (n = 7)
Educational Level (%)	, ,	, ,	, ,
HS or GED	12% (n = 2)	0%	29% (n = 2)
Some College	53% (n = 9)	50% (n = 5)	57% (n = 4)
Post-College/Graduate	35% (n = 6)	50% (n = 5)	14% (n = 1)
Degree	()	\ /	/ /
BDI Pre-Test Total M (SD)**	9.44 (8.00)	11.44 (8.75)	6.86 (6.64)
,	Range: 0-30	Range: 0-30	Range: 1-17
BDI Post-Test Total M (SD)	5.53 (6.09)	5.10 (6.10)	6.14 (6.52)
\	Range: 0-21	Range: 0-21	Range: 0-15
MW Pre-Test Total M (SD)	77.24 (16.22)	75.5 (18.01)	79.71 (14.24)
,	Range: 35-99.5	Range: 35-96.5	Range: 57-99.5
MW Post-Test Total M (SD)	87.53 (13.28)	90.40 (12.58)	83.43 (14.13)
,	Range: 57.5-103	Range: 57.5-103	Range: 63-96
BDI Change Scores M (SD)	-4.88 (7.91)	-8.11 (9.29)	-0.71 (2.23)
(0-)	Range: -30-2	Range: -30-0	Range: -5-2
MW Change Scores M (SD)	10.29 (17.06)	14.9 (19.76)	3.71 (10.23)
in the straige sected in (SB)	Range: -10-57.5	Range: -10-57.5	Range: -8-22
* A : 'C' 41 1'CC 4	<u>e</u>	0	80. 0 22

^{*}Age was significantly different between groups, F = 5.76, p = .030**n = 16 for the BDI, 1 person in the *Agnihotra* group was missing data for this measure and therefore not included