

IMPACT OF HEARTFULNESS PRACTICE ON MENTAL WELLBEING

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Abstract

Heartfulness is a meditative practice system rooted in the tradition of Raja Yoga, re-contextualized for contemporary application in diverse cultural, social, and institutional settings. From a psychological and physiological standpoint, Heartfulness practice align with key outcomes associated with mindfulness-based interventions, such as stress reduction, emotional regulation, improved attention, and enhanced well-being. Mental well-being refers to a state of mental health in which an individuals realize their own abilities, can cope with normal stresses of life, and work productively. In this paper, research conducted on mental well-being of students before and after Heartfulness practice in higher secondary school and colleges at Anantapuram, Andhra Pradesh is presented. Three parameters Depression, Anxiety and Stress were considered for the assessment of mental wellbeing of students. The statistical tools such as Frequency distribution Cronbach's Alpha, Chi-Descriptive Paired Samples T-Test were applied to arrive at a meaningful interpretation. The analysis demonstrates the efficacy of Heartfulness practice in significantly reducing depressive, Anxiety and Stress symptoms.

Key words: Heartfulness practice, Mental well-being, Depression, Anxiety and Stress.

1. Introduction

In recent years, there has been an increasing recognition of the mental health challenges faced by the entire world, especially students. This includes heightened levels of stress, anxiety, depression and emotional imbalance. Apart from various methods, Yoga, meditation, and mindfulness-based interventions have demonstrated efficacy in alleviating such concerns. The empirical evidence specifically evaluating the impact of Heartfulness Meditation on student mental well-being remains limited in this regard. The existing body of research predominantly focuses on general mindfulness practices or combines Heartfulness with other techniques, thereby failing to isolate its unique effects. Furthermore, many of these studies are constrained by methodological limitations, including small sample sizes, lack of control groups, short intervention durations, and inconsistent use of validated psychological assessment tools. Given the growing mental health burden among student populations, it is imperative to conduct large-scale, and controlled investigations to rigorously assess the effectiveness of Heartfulness practices in enhancing mental well-being.

Heartfulness is a meditative practice system rooted in the tradition of Raja Yoga, recontextualized for contemporary application in diverse cultural, social, and institutional settings. Heartfulness emphasizes experiential learning through meditation focused on the heart as a centre of emotional, cognitive, and spiritual consciousness. From a psychological and

physiological standpoint, Heartfulness practices align with key outcomes associated with mindfulness-based interventions, such as stress reduction, emotional regulation, improved attention, and enhanced well-being. It dwells deep into themes such as consciousness studies, neuroplasticity, affective neuroscience, and the psychology of well-being.

Mental well-being generally refers to a state of mental health in which an individuals realize their abilities to cope with the normal stress in life, productive work, and contribute effectively. Unlike mental illness, which focuses on diagnosed conditions, mental well-being emphasizes positive functioning, resilience, and quality of life. Several factors influence mental well-being, viz. Biological factors, Psychosocial factors, and Environmental factors. Students' academic pressure, social comparisons, and uncertainty about the future contribute to mental strain. Further, it is observed that developmental milestones, parental support, and school environment play major roles in adolescents.

Stress is the body's response to any demand or challenge. It can be physical, emotional, or psychological and may arise from both negative and positive events. Common Symptoms of Stress are Irritability, anxiety, depression, feeling overwhelmed, social withdrawal, and poor concentration. Exercise, Relaxation techniques, Sleep, Social support, and Heartfulness Practice help in overcoming stress.

Anxiety is a natural stress response characterized by feelings of worry, nervousness, or fear. While it's a normal and often helpful reaction to potentially dangerous situations, excessive or persistent anxiety can interfere with daily life and may indicate an anxiety disorder. Common Symptoms of Anxiety are Restlessness or feeling "on edge", Fatigue, Difficulty concentrating, Irritability, Muscle tension, and Sleep disturbances [ref].

Depression is commonly understood as a mood disorder marked by pervasive sadness, low self-worth, and loss of interest or pleasure in most activities. However, in clinical and research contexts, its characterization is multifaceted. The World Health Organization defines depression as a "common mental disorder, characterized by persistent sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities, accompanied by an inability to carry out daily activities." Depression is etiologically heterogeneous, involving an interplay between biological, psychological, and social factors.

2. Literature Review

Mansee Thakur; et al; (2023) conducted a study on "The impact of Heartfulness Meditation practice on anxiety, perceived stress, wellbeing and telomere length". Yoga and Meditation practices were followed to reduce exhaustion, stress, and burnout. The participants were divided into two groups, Heartfulness Intervention and control group. It was observed that the cortisol levels in the Meditators group significantly decreased after the intervention as compared to the non-meditators group; whereas telomere length increased in the meditators group. Anxiety and perceived stress also decreased post-intervention, and wellbeing, mindfulness increased as assessed by the questionnaire tools, although the decrease in perceived stress was statistically insignificant. A negative correlation was observed between

telomere length and cortisol where as a positive correlation was found between telomere length and wellbeing.

Ghazal Suhani Yadav, et al; (2021) conducted a study on “Using Heartfulness Meditation and Brainwave Entertainment to improve teenage Mental Wellbeing”. This study evaluated the use of Heartfulness Meditation and Audio Brainwave Entertainment to help teenagers cope with mental health issues. The authors used 30 min Heartfulness meditation and 15 min brainwave entertainment sessions with binaural beats and isochronic tones thrice a week for a duration of 4 weeks. The key variables such as stress levels, state depression, anger and sleep quality were used. The methods like pre-test, post-test Methodology, perceived stress scale, patient health questing-9, profile of Mood state and Cambridge Brain Assessment were adopted. This study proved the efficacy of a 4-week Heartfulness Meditation Program to regulate overall mood, stress levels, state depression (POMS), and anger. Secondary analysis affirmed the use of the Heartfulness intervention to ameliorate overall mood and state depression (POMS). Results indicated that adding Audio Brainwave Entertainment to Heartfulness Meditation may improve sleep quality and stress levels.

P.K.Jyothi et al; (2023) conducted a study on “Impact of Heartfulness Meditation on perceived stress and Mental Well-being”. This study aimed to help individuals connect to their inner selves to attain peace and a balanced state of mind. Authors introduced variables like stress and Mental illness. The Perceived Stress Scale (PSS) and WHO-wellbeing questionnaire were used for the assessment. The Heartfulness Meditation Programme was conducted offline over 90 days, with each session lasting for 30 minutes. A pre-test and post post-test subjective evaluation was conducted among the participants, before and after the programme to assess its impact on their mental wellbeing. There was a significant reduction in the stress and increase in the overall well-being.

Kunal Desai et al; (2021) conducted a study on “Impact of Heartfulness Meditation Programme on stress, Quality of sleep, and Psychological wellbeing during the COVID-19 Pandemic. A mixed Method Study”. This study aimed to investigate whether using a virtual heart-based meditation programme is associated with improved stress levels and quality of sleep among participants from the general population during the COVID-19 Pandemic. The variables such as stress, quality of sleep, and Psychological well-being were used as the parameters for the assessment. A pre-test single-arm intervention study assessed the effect of an 8-week heart-based meditation on the stress level using the Perceived Stress Scale (PSS) and quality of sleep using the Pittsburgh Sleep Quality Index (PSQI). The authors used interventions such as Orientation and Education sessions, Meditation with a Heartfulness trainer, and self-practice of Rejuvenation and bedtime prayer meditation. It was found that a significant reduction in perceived stress score and improvement in sleep quality index were noted at the end of an 8-week Heartfulness meditation programme.

Virginia Lemay Pharm D. et al; (2024) conducted a study on “Impact of a Yoga and Meditation Intervention on student’s stress and Anxiety Levels”. This study was carried out to evaluate the impact of a six-week Yoga and meditation intervention on college students’ stress perception, anxiety levels, and mindfulness skills. The authors followed pre and post-intervention

questionnaires to evaluate changes in stress levels, anxiety levels, and mindfulness skills. The questionnaire consisted of three self-reporting tools: the Beck Anxiety Inventory (BAI), the Perceived Stress Scale (PSS), and the Five Factor Mindfulness Questionnaire (FFMa). Students' scores on each were assessed to detect any changes from baseline using the numerical and categorical scales (low, medium and high) for each instrument. The result indicated that adopting a mindfulness practice for as little as once per week for six weeks may reduce stress and anxiety in college students. Though the above studies highlighted the benefits of meditation on mental well-being, but limited research works specifically focus on the benefits of Heartfulness Meditation among students. Thakur et al. (2023) showed physiological and psychological benefits in clinical populations, while Yadav et al. (2021) reported reduced stress in teenagers using virtual sessions. Studies by Jyothi et al. (2023) and Desai et al. (2021) lacked large samples and rigorous controls. Most student-focused research involved general mindfulness or yoga sessions. Inconsistent tools and short intervention durations further limit generalizability. This underscores the need for large-scale, controlled studies assessing the sustained impact of Heartfulness Meditation on student mental well-being.

Objective:

- To assess the Impact of Heartfulness practices on Mental wellbeing (With reference to School/College Students at Anantapuram, Andhra Pradesh)

Hypothesis

- Null Hypothesis (H_0): There is no significant difference in students mental well-being before and after Heartfulness practice.
- Alternative Hypothesis (H_1): There is a significant difference in students mental well-being before and after Heartfulness practice.

METHODOLOGY

Sampling Framework

Refers to the framework that is fixed for the purpose of predefining and drawing the sample from the sample universe, the framework pre supposes to draw the sample from schools and colleges at Ananthapuram, Andhra Pradesh during the research period.

Sample Characteristics

Those that are reflect in the sample respondents, all students irrespective of their Gender, falling under the age group of 15 years to 18 years and above studying in schools and colleges.

Sample Unit

A selected male and female respondent from secondary Schools, PU Colleges and Undergraduate colleges at Anantapuram in the age group of 15 – 25 years.

Sampling Technique

The process of drawing sample respondents from the sample universe is known as sampling technique, among many techniques available, Stratified sampling is employed for the purpose

since it is more appropriate as the sample respondents are distributed in different strata's across of schools and colleges in Anantapura.

Sample size

For the huge population, the sample size determined by Kukeran Formula; Kukeran developed the following formula for calculating the required number of samples in the random sampling method. The sample size calculated is 570 for the study. The sample size is in proportion to the size of the sector.

DATA COLLECTION

The data collected for the present study comprises of both primary and secondary sources.

Primary data

Data Collected from respondents through questionnaire. The respondents were interviewed and asked to fill the questionnaire. The first part deals respondents profile in terms of their age, sex, education and place. The second part of the questionnaire contains the questions related to Mental wellbeing. The responses were taken before and after three months of Heartfulness practice.

STATISTICAL PROCESSING

In the first stage the data collected through questionnaire was classified alongside 1 to 5 ratings, individual weightages awarded by respondents for each element of the model in the questionnaire were tabulated on these five points of the scale against classification of demographic profile, like age, sex, education, designation, income. Further, the weightages were analyzed using statistical tools to arrive at meaningful inferences.

Data Analysis and Interpretations:

Table 1: Frequency Distribution test for Age

Age (Years)	Frequency	Percent	Valid Percent	Cumulative Percent
15	178	31.2	31.2	31.2
16-17	207	36.3	36.3	67.5
18 and above	185	32.5	32.5	100.0
Total	570	100.0	100.0	

The table 1 shows the distribution of 570 respondents categorized into three age groups: 15 years, 16–17 years, and 18 years and above. The largest proportion of participants falls within the 16–17 age group, accounting for 36.3% of the sample. This is followed by the 18 and above category at 32.5%, and the 15-year-old group at 31.2%. Since the percent and valid percent columns are identical and total 100%, it indicates that all data is valid with no missing or excluded entries. This distribution highlights a relatively balanced age representation, with a slightly higher concentration of participants in the mid-teen range.

Table 2: Frequency Distribution test for Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	229	40.2	40.2	40.2

Female	341	59.8	59.8	100.0
Total	570	100.0	100.0	

The table 2 presents the gender composition of a sample consisting of 570 respondents. Out of these, 229 individuals (40.2%) identified as male and 341 individuals (59.8%) identified as female. This indicates a female-majority sample, with nearly 60% of respondents identifying as female.

Table 3: Frequency Distribution test for Education

Education	Frequency	Percent	Valid Percent	Cumulative Percent
SSC	178	31.2	31.2	31.2
PUC/Intermediate	193	33.9	33.9	65.1
Under graduate	199	34.9	34.9	100.0
Total	570	100.0	100.0	

Table 3 presents the Education composition of a sample consisting of 570 respondents. Out of these 178 individuals (31.2%) identified as SSC students, 193 individuals (58.9%) identified as PUC /Intermediate students, and 199 individuals (34.9%) identified as undergraduate students. This indicates the distribution of sample highlights a relatively balanced education representation, with a slightly higher concentration of respondents in undergraduate students.

Table 4: Frequency Distribution test for Place

Place	Frequency	Percent	Valid Percent	Cumulative Percent
Urban	231	40.5	40.5	40.5
Semi Urban	98	17.2	17.2	57.7
Rural	241	42.3	42.3	100.0
Total	570	100.	100	

The above table presents the distribution of 570 respondents categorized in to three place groups: Urban, Semi urban and rural. Out of these 231 individuals (40.5%) identified as Urban areas, 98 individuals (17.2%) identified as Semi urban areas and 241 individuals (42.3%) identified as rural areas. This indicates there is a slight difference between Urban and rural respondents. The participants who are semi-urban highlights slightly less concentration of participants in the semi-urban areas.

Table 5: Scale Reliability Test for Mental Well being

Cronbach's Alpha	N of Items
0.771	21

Table 5 presents the result of a reliability analysis using Cronbach’s Alpha. The Cronbach’s Alpha coefficient is reported as 0.771, which indicates good and acceptable internal consistency among the 21 items included in the scale. This suggests that the items are highly interrelated and consistently measure the construct of mental well-being. A value above 0.7 is generally considered good and acceptable internal consistency, implying that the scale is reliable for assessing mental well-being in the sample studied. The number of items, reported

as 21, indicates a comprehensive scale, and the high alpha value reflects that the scale items likely work well together to assess the intended psychological construct.

Table 6: Descriptive Statistics - Heartfulness Practice on Mental Wellbeing-Depression

		Mean	N	Std. Deviation	Std. Error Mean
I couldn't seem to experience any positive feeling	Pre Heartfulness Practice	2.9123	570	1.13082	.04736
	Post Heartfulness Practice	1.5544	570	.80728	.03381
I found it difficult to work up the initiative to do things	Pre Heartfulness Practice	3.1281	570	1.13240	.04743
	Post Heartfulness Practice	1.8649	570	1.00491	.04209
I felt like I had nothing to look forward	Pre Heartfulness Practice	2.8579	570	1.14309	.04788
	Post Heartfulness Practice	1.8000	570	.91194	.03820
I experienced difficulty breathing.	Pre Heartfulness Practice	2.8263	570	1.33745	.05602
	Post Heartfulness Practice	1.7281	570	.93068	.03898
I felt down-hearted and blue	Pre Heartfulness Practice	2.9000	570	1.26554	.05301
	Post Heartfulness Practice	1.7754	570	.88261	.03697
I was unable to become enthusiastic about anything	Pre Heartfulness Practice	2.7316	570	1.26459	.05297
	Post Heartfulness Practice	1.6439	570	.90566	.03793
I felt I was not worth much as a person	Pre Heartfulness Practice	3.0298	570	1.30330	.05459
	Post Heartfulness Practice	1.6000	570	.84969	.03559

Table 6 highlights clear, positive impacts of Heartfulness practice on reducing symptoms associated with depression. Before practicing Heartfulness, participants commonly reported difficulty experiencing positivity (mean=2.91) and initiating activities (mean=3.13). After engaging in Heartfulness, these scores substantially decreased to 1.55 and 1.86, respectively, indicating meaningful improvement. Similar reductions appeared in feelings of hopelessness (2.86 to 1.80), emotional sadness (2.90 to 1.78), breathing difficulties (2.83 to 1.73), low enthusiasm (2.73 to 1.64), and self-worth concerns (3.03 to 1.60). Clearly, practicing Heartfulness significantly helps individuals enhance emotional resilience and considerably reducing depressive symptoms, supporting overall mental wellbeing.

Table 7: Correlation Analysis - Heartfulness practice on Mental Wellbeing-Depression

		N	Correlation	Sig.
I couldn't seem to experience any positive feeling	Pre and post Heartfulness Practice	570	-.012	.773
I found it difficult to work up the initiative to do things	Pre and post Heartfulness Practice	570	.035	.400
I felt like I had nothing to look forward	Pre and post Heartfulness Practice	570	.042	.319
I experienced difficulty breathing.	Pre and post Heartfulness Practice	570	.026	.543
I felt down-hearted and blue	Pre and post Heartfulness Practice	570	-.030	.481
I was unable to become enthusiastic about anything	Pre and post Heartfulness Practice	570	.033	.432
I felt I was not worth much as a person	Pre and post Heartfulness Practice	570	.017	.683

Table 7 correlation analysis reveals minimal statistical associations between depressive symptoms before and after Heartfulness practice. All observed correlations are extremely weak and statistically insignificant. For instance, difficulty initiating activities ($r=0.035$, $p=0.400$), hopelessness ($r=0.042$, $p=0.319$), and experiencing positive feelings ($r=-0.012$, $p=0.773$) showed negligible relationships. Other symptoms such as feeling downhearted ($r=-0.030$, $p=0.481$), breathing difficulties ($r=0.026$, $p=0.543$), low enthusiasm ($r=0.033$, $p=0.432$), and low self-worth ($r=0.017$, $p=0.683$) also exhibited insignificant correlations. Thus, individual symptom changes following Heartfulness practice appear independent, suggesting varied personal responses rather than uniform symptom patterns among participants.

Table 8: Paired Samples T-Test for Before and After Heartfulness practice on Mental Wellbeing-Depression

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
I couldn't seem to experience any positive feeling	Pre and post Heartfulness Practice	1.35789	1.39733	.05853	1.24294	1.47285	23.201	569	.000
I found it difficult to work up the initiative to do things	Pre and post Heartfulness Practice	1.26316	1.48722	.06229	1.14081	1.38551	20.278	569	.000
I felt like I had nothing to look forward	Pre and post Heartfulness Practice	1.05789	1.43217	.05999	.94007	1.17572	17.635	569	.000
I experienced difficulty breathing.	Pre and post Heartfulness	1.09825	1.60978	.06743	.96581	1.23068	16.288	569	.000

	Practice								
I felt down-hearted and blue	Pre and post Heartfulness Practice	1.12456	1.56418	.06552	.99588	1.25325	17.165	569	.000
I was unable to become enthusiastic about anything	Pre and post Heartfulness Practice	1.08772	1.53094	.06412	.96177	1.21367	16.963	569	.000
I felt I was not worth much as a person	Pre and post Heartfulness Practice	1.42982	1.54356	.06465	1.30284	1.55681	22.115	569	.000

Table 8 paired samples t-test indicates highly significant improvements in depressive symptoms following Heartfulness practice. Symptoms such as difficulty experiencing positive feelings ($t=23.201, p=.000$), initiating tasks ($t=20.278, p=.000$), hopelessness ($t=17.635, p=.000$), breathing issues ($t=16.288, p=.000$), feeling downhearted ($t=17.165, p=.000$), reduced enthusiasm ($t=16.963, p=.000$), and worthlessness ($t=22.115, p=.000$) improved notably. The substantial mean differences (ranging from 1.057 to 1.429) underscore significant emotional relief and enhanced mental well-being achieved by participants through Heartfulness practice, clearly demonstrating its effectiveness in reducing depressive symptomatology across various emotional and cognitive dimensions.

Table 9: Descriptive Statistics - Heartfulness Practice on Mental Wellbeing-Anxiety

		Mean	N	Std. Deviation	d. Error Mean
I was aware of the dryness of my mouth	Pre Heartfulness Practice	3.1895	570	1.26709	.05307
	Post Heartfulness Practice	3.5632	570	1.29228	.05413
I experienced difficulty breathing	Pre Heartfulness Practice	2.9123	570	1.25039	.05237
	Post Heartfulness Practice	3.2596	570	1.62557	.06809
I experienced trembling	Pre Heartfulness Practice	3.3761	569	1.28474	.05386
	Post Heartfulness Practice	2.8313	569	1.41658	.05939
I was worried about situations in which I might panic and make a fool of myself	Pre Heartfulness Practice	3.4860	570	1.24106	.05198
	Post Heartfulness Practice	2.6246	570	1.45323	.06087
I felt I was close to panic	Pre Heartfulness Practice	3.2000	570	1.28339	.05376
	Post Heartfulness Practice	2.5526	570	1.46363	.06130
I was aware of the action of my heart in the absence of Physical exertion	Pre Heartfulness Practice	3.2228	570	1.18181	.04950
	Post Heartfulness Practice	3.8404	570	1.31936	.05526
I felt scared without any good reason	Pre Heartfulness Practice	3.1158	570	1.32461	.05548
	Post Heartfulness Practice	2.3298	570	1.38913	.05818

Table 9 descriptive statistics highlight improvements in anxiety symptoms following Heartfulness practice. Participants reported reduced trembling (mean from 3.38 to 2.83), less worry about embarrassment (3.49 to 2.62), decreased panic sensations (3.20 to 2.55), and reduced unexplained fear (3.12 to 2.33). Conversely, awareness of breathing difficulty slightly increased (2.91 to 3.26), alongside greater mouth dryness (3.19 to 3.56) and heart-rate awareness (3.22 to 3.84). Overall, the results suggest Heartfulness practice effectively alleviates emotional anxiety but may heighten certain physical awareness, indicating a nuanced effect where emotional relief accompanies increased sensitivity to bodily sensations.

Table 10: Correlation Analysis - Heartfulness practice on Mental Wellbeing- Anxiety

Table 10: Correlation Analysis - Heartfulness practice on Mental Wellbeing- Anxiety				
		N	Correlation	Sig.
I was aware of dryness of my mouth	Pre and post Heartfulness Practice	570	.042	.316
I experienced difficulty breathing	Pre and post Heartfulness Practice	570	-.022	.592
I experienced trembling	Pre and post Heartfulness Practice	569	.084	.045
I was worried about situations in which I might panic and make a fool of myself	Pre and post Heartfulness Practice	570	.096	.021
I felt I was close to panic	Pre and post Heartfulness Practice	570	-.004	.929
I was aware of the action of my heart in the absence of Physical exertion	Pre and post Heartfulness Practice	570	.017	.682
I felt scared without any good reason	Pre and post Heartfulness Practice	570	.032	.449

Table 10 correlation analysis shows minimal associations between anxiety symptoms before and after practicing Heartfulness, suggesting that individual experiences vary considerably. Notably, worry about panic embarrassment ($r=.096$, $p=.021$) and trembling ($r=.084$, $p=.045$) show very small but statistically significant correlations, indicating a slight consistency in symptom reduction among individuals. Conversely, symptoms like panic sensations ($r=-.004$, $p=.929$), breathing difficulties ($r=-.022$, $p=.592$), mouth dryness ($r=.042$, $p=.316$), unexplained fear ($r=.032$, $p=.449$), and heart-rate awareness ($r=.017$, $p=.682$) lack significant correlations. These findings suggest Heartfulness affects anxiety individually rather than uniformly across all participants.

Table 11: Paired Samples T-Test for Before and After Heartfulness practice on Mental Wellbeing- Anxiety

Table 11: Paired Samples T-Test for Before and After Heartfulness practice on Mental Wellbeing- Anxiety							
	Paired Differences				t	df	Sig. (2-
	Mean	Std.	Std. Error	95% Confidence Interval of the Difference			

			Deviation	Mean	Lower	Upper			tailed)
I was aware of dryness of my mouth	Pre and post Heartfulness Practice	-.37368	1.77138	.07420	-.51941	-.22795	-5.037	569	.000
I experienced difficulty breathing	Pre and post Heartfulness Practice	-.34737	2.07302	.08683	-.51791	-.17682	-4.001	569	.000
I experienced trembling	Pre and post Heartfulness Practice	.54482	1.83045	.07674	.39409	.69554	7.100	568	.000
I was worried about situations in which I might panic and make a fool of myself	Pre and post Heartfulness Practice	.86140	1.81773	.07614	.71186	1.01095	11.314	569	.000
I felt I was close to panic	Pre and post Heartfulness Practice	.64737	1.95022	.08169	.48693	.80781	7.925	569	.000
I was aware of the action of my heart in the absence of Physical exertion	Pre and post Heartfulness Practice	-.61754	1.75605	.07355	-.76201	-.47308	-8.396	569	.000
I felt scared without any good reason	Pre and post Heartfulness Practice	.78596	1.88877	.07911	.63058	.94135	9.935	569	.000

Table 11 The paired samples t-test clearly indicates Heartfulness practice significantly influences anxiety symptoms among participants. Statistically significant improvements are evident across symptoms including mouth dryness ($t=-5.037$, $p=.000$), breathing difficulties ($t=-4.001$, $p=.000$), trembling ($t=7.100$, $p=.000$), panic embarrassment worries ($t=11.314$, $p=.000$), panic sensations ($t=7.925$, $p=.000$), heart-rate awareness ($t=-8.396$, $p=.000$), and unexplained fears ($t=9.935$, $p=.000$). These significant mean differences highlight substantial emotional and physiological relief participants experienced post-practice. Clearly, engaging in Heartfulness significantly reduces anxiety-related distress, thus demonstrating robust effectiveness as an accessible method to alleviate anxiety symptoms and improve overall mental wellbeing.

Hypothesis: The hypothesis tested was that systematic engagement in Heartfulness practice significantly reduces anxiety symptoms. Hence alternate hypothesis is accepted.

Mental Wellbeing – Stress

Table 12: Descriptive Statistics - Heartfulness Practice on Mental Wellbeing - Stress
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		Mean	N	Std. Deviation	Std. Error Mean
I found it hard to wind down	Pre Heartfulness Practice	3.2912	570	1.24196	.05202
	Post Heartfulness Practice	2.3965	570	1.28558	.05385
I tended to over-react to the circumstances or situations	Pre Heartfulness Practice	3.1912	570	1.21224	.05078
	Post Heartfulness Practice	2.8754	570	1.42914	.05986
I felt that I was using a lot of nervous energy	Pre Heartfulness Practice	3.3105	570	1.19756	.05016
	Post Heartfulness Practice	2.3456	570	1.26804	.05311
I found myself getting agitated	Pre Heartfulness Practice	3.1860	570	1.41812	.05940
	Post Heartfulness Practice	2.2228	570	1.23986	.05193
I found it difficult to relax	Pre Heartfulness Practice	3.2158	570	1.24535	.05216
	Post Heartfulness Practice	2.2228	570	1.23986	.05193
I was in tolerant of anything that kept me from getting on with what I was doing	Pre Heartfulness Practice	3.6000	570	1.31023	.05488
	Post Heartfulness Practice	2.4070	570	1.40397	.05881
I felt that I was rather touchy	Pre Heartfulness Practice	2.8840	569	1.25200	.05249
	Post Heartfulness Practice	2.3497	569	1.41757	.05943

Table 12 The descriptive statistics clearly indicate positive changes in stress symptoms after participants engaged in Heartfulness practice. Noticeable improvements emerged, especially in intolerance toward interruptions (mean reduced from 3.60 to 2.41), difficulty relaxing (3.22 to 2.22), winding down (3.29 to 2.40), and excessive nervous energy usage (3.31 to 2.35). Other symptoms like agitation (3.19 to 2.22), emotional over reactivity (3.19 to 2.88), and touchiness (2.88 to 2.35) also significantly declined. These results strongly suggest that Heartfulness practice effectively enhances emotional calmness, reduces agitation, and helps individuals cope better with daily stressors, significantly improving overall mental wellbeing.

		N	Correlation	Sig.
I found it hard to wind down	Pre and post Heartfulness Practice	570	.076	.069
I tended to over-react to the circumstances or situations	Pre and post Heartfulness Practice	570	-.042	.317
I felt that I was using a lot of nervous energy	Pre and post Heartfulness Practice	570	.095	.024
I found myself getting agitated	Pre and post Heartfulness Practice	570	.057	.171
I found it difficult to relax		570	-.081	.052
I was in tolerant of anything that kept me from getting on with what I was doing	Pre and post Heartfulness Practice	570	-.045	.282

I felt that I was rather touchy	Pre and post Heartfulness Practice	569	-.023	.588
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Table 13 The correlation analysis reveals minimal associations between stress symptoms before and after Heartfulness practice, suggesting individual variability rather than uniform improvement patterns. Only the symptom of excessive nervous energy showed a very small yet statistically significant positive correlation ($r=.095$, $p=.024$), indicating slight consistency in participants' reduction of this specific symptom. All other symptoms, such as winding down difficulty ($r=.076$, $p=.069$), relaxation difficulty ($r=-.081$, $p=.052$), over reactivity ($r=-.042$, $p=.317$), agitation ($r=.057$, $p=.171$), intolerance toward interruptions ($r=-.045$, $p=.282$), and touchiness ($r=-.023$, $p=.588$), showed negligible correlations, highlighting individualized experiences of stress relief after Heartfulness practice.

Table 14: Paired Samples T-Test for Before and After Heartfulness practice on Mental Wellbeing-Stress

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
I found it hard to wind down	Pre and post Heartfulness Practice	.89474	1.71814	.07196	.75339	1.03609	12.433	569	.000
I tended to over-react to the circumstances or situations	Pre and post Heartfulness Practice	.31579	1.91248	.08010	.15845	.47313	3.942	569	.000
I felt that I was using a lot of nervous energy	Pre and post Heartfulness Practice	.96491	1.65966	.06952	.82837	1.10145	13.881	569	.000
I found myself getting agitated	Pre and post Heartfulness Practice	.96316	1.82938	.07662	.81266	1.11366	12.570	569	.000
I found it difficult to relax	Pre and post Heartfulness Practice	.99298	1.82733	.07654	.84265	1.14331	12.974	569	.000
I was in tolerant of anything that kept me from getting on with what I was doing	Pre and post Heartfulness Practice	1.19298	1.96309	.08222	1.03148	1.35448	14.509	569	.000
I felt that I was rather touchy	Pre and post Heartfulness Practice	.53427	1.91252	.08018	.37679	.69175	6.664	568	.000

Table 14 The paired samples t-test clearly indicates substantial improvements in stress symptoms following Heartfulness practice. Participants showed significant reductions in difficulty winding down ($t=12.433$, $p=.000$), overreactivity ($t=3.942$, $p=.000$), excessive nervous energy ($t=13.881$, $p=.000$), agitation ($t=12.570$, $p=.000$), relaxation difficulty ($t=12.974$, $p=.000$), intolerance toward interruptions ($t=14.502$, $p=.000$), and touchiness ($t=6.564$, $p=.000$). These substantial mean differences (ranging from .315 to 1.193) strongly highlight the effectiveness of Heartfulness practice in managing and alleviating stress, significantly enhancing emotional stability, relaxation capacity, and overall psychological resilience in participants.

Hypothesis: The hypothesis tested was that regular engagement in Heartfulness practice significantly reduces stress-related symptoms. Hence alternate hypothesis is accepted.

Findings

- **Depression:** The analysis found significant reductions in all measured depressive symptoms after Heartfulness practice. Highly significant improvements emerged notably in experiencing positivity, initiative taking, and reduced feelings of worthlessness. Other symptoms also significantly decreased, including hopelessness, breathing difficulties, feeling downhearted, and diminished enthusiasm. Results confirm Heartfulness practice significantly alleviates depression symptoms, strongly supporting its efficacy for enhancing emotional and mental wellbeing.

- **Anxiety:** Results robustly support the hypothesis, revealing statistically significant symptom reductions post-Heartfulness practice. Anxiety significantly improved in trembling, embarrassment worries, panic sensations, unexplained, mouth dryness, breathing difficulties, and heart-rate awareness. Thus, findings clearly demonstrate Heartfulness effectively alleviates both emotional and physiological anxiety symptoms, significantly reducing distress and strongly confirming its therapeutic value in managing anxiety and improving psychological wellbeing.

- **Stress:** The findings robustly support the hypothesis, revealing significant decreases across all stress indicators. Notably, significant improvements occurred in intolerance toward interruptions, excessive nervous energy usage, agitation, relaxation difficulties, winding down difficulty, emotional over reactivity, and touchiness. Clearly, these results confirm Heartfulness practice substantially reduces stress, systematically enhancing emotional and psychological wellbeing, and strongly affirming its effectiveness as an accessible stress management approach.

Suggestion:

- **Depression:** Based on findings, it is recommended to integrate Heartfulness practice widely within mental health interventions, especially targeting depressive symptoms. Educational institutions could also benefit by promoting structured Heartfulness programs. Continuous monitoring and structured guidance can optimize the practice's benefits, ensuring sustained emotional resilience.

- **Anxiety:** Considering these positive findings, widespread integration of Heartfulness practice into anxiety-management programs is recommended. Monitoring and personalized guidance may help manage heightened awareness of physical symptoms like dryness or breathing difficulties, optimizing practice outcomes. Educational settings would benefit from

structured Heartfulness initiatives, systematically promoting emotional resilience and anxiety reduction.

- **Stress:** Based on these compelling results, integrating Heartfulness practice systematically into stress-management and emotional resilience programs is highly recommended. Structured training sessions and guided practice can optimize outcomes.

Conclusion:

- **Depression:** The study exhibits the efficacy of Heartfulness practice in significantly reducing depressive symptoms. Systematic Heartfulness practice emerges as a highly effective, accessible, and valuable mental health tool capable of enhancing emotional wellbeing.
- **Anxiety:** The study establishes compelling evidence of Heartfulness practice significantly reducing anxiety symptoms across emotional and physiological domains. Systematic Heartfulness practice emerges as an effective, accessible therapeutic strategy for anxiety alleviation, substantially enhancing emotional wellbeing and physiological comfort.
- **Stress:** The study institutes Heartfulness practice as significantly effective in reducing stress symptoms. Heartfulness practice presents as an accessible, highly beneficial approach to systematically enhance stress resilience, emotional stability, and overall mental wellbeing.

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