

Available Online at http://www.recentscientific.com

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research Vol. 10, Issue, 05(B), pp. 32261-32267, May, 2019 International Journal of Recent Scientific Re*r*earch

DOI: 10.24327/IJRSR

Research Article

HEARTFULNESS MEDITATION CULTIVATES GRATITUDE

*Dr. Raja Amarnath G¹, Dr. Prabhakar Akurathi², Chitra Rajan³, Aiswarya Ravichandran⁴, Dr. Ravindra Deshpande⁵, Varalakshmi A⁶, Dr. Ved Prakash Vyas⁷ and Rani Vijayan⁸

¹Pulmonology and critical care, Sree Balaji Medical College & Hospital, Apollo Hospitals, Chennai,
²Department of Community Medicine, NRI Medical College, Chinakakani, Andhra Pradesh,
³Consultant-Environmental Sustainability, Chennai,
⁴Clinical Researcher, CIPACA Institute of Research, Chennai,
⁵Clinical Researcher, Wake Forest School of Medicine, North Carolina, USA,
⁶Statistics, CIPACA Institute of Research, Chennai,
⁷Department of Pediatrics, Govt Dhanwantri Ayurvedic Medical College, Ujjain, India,

⁸ Research Assistant, acupuncturist and Pranic healer, USA

DOI: http://dx.doi.org/10.24327/ijrsr.2019.1005.3433

ARTICLE INFO

Article History: Received 6th February, 2019 Received in revised form 15th March, 2019 Accepted 12th April, 2019 Published online 28th May, 2019

Key Words:

Gratitude, heartfulness meditation, stress, rejuvenation, positive psychology.

ABSTRACT

Studies in positive psychology have established that gratitude is a necessary trait for life satisfaction. Heartfulness Meditation, practised by millions of people world over, offers a means to reconnect with one's higher self through meditation on the heart. We conducted a study to assess whether Heartfulness Meditation promotes dispositional gratitude among its practitioners. The study comparing the gratitude levels of Heartfulness Meditators with non-meditators was conducted by a cross-sectional survey of 1,746 Heartfulness Meditators and 1,159 non-meditators, over 18 years of age. The six-item Gratitude Ouestionnaire (GO-6; McCullough et al., 2002) was used to assess the level of gratitude in the lives of the participants. The means were compared using an Independent sample t test out of the responses gathered from a 7-point Likert scale rated 1 (strongly disagree) to 7 (strongly agree). The results show significantly higher mean value of gratitude among practitioners of Heartfulness Meditation (M±SD = 22.2566±9.49761) as compared to non-meditators (M±SD = 20.3581±8.66894) (p=0.000); both at an overall level as well as across different socio-demographic groups. These findings indicate that Heartfulness Meditators have higher gratitude than individuals who do not meditate. The core practices of Heartfulness Meditation are meditation on the heart, removal of mind clutter at the subconscious level and introspection to promote an attitude of contemplation We infer that cumulative effect of regular practice of the above could possibly contribute to a

disposition of gratitude among Heartfulness Meditators.

Copyright © **Dr. Raja Amarnath** G *et al*, 2019, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Gratitude – as a behaviour, emotion or trait has been associated with many positive outcomes including greater happiness, better health, optimism and self-esteem¹. Religious traditions such as Judaism, Christianity, Jainism, Buddhism, Islam and Hinduism encourage cultivation and expression of gratitude towards God and fellow beings as an important moral virtue. Research indicates that gratitude is deep rooted in many aspects of human evolution such as our brains, DNA and in child development². Neuroscience studies indicate that specific areas of brain are accessed while experiencing and expressing gratitude. This strengthens the evidence that gratitude is an intrinsic and established human experience. "Reciprocal altruism is also a well-documented behaviour in many animal species such as fish, birds and mammals"³.

Theoretical definitions of gratitude in clinical research have wide connotations. Emmons and McCullough (2003) define gratitude as "the perception of a positive personal outcome not necessarily deserved or earned that is due to the actions of another person"¹

*Corresponding author: Dr. Raja Amarnath G

Pulmonology and critical care, Sree Balaji Medical College & Hospital, Apollo Hospitals, Chennai,

According to Wood, Froh, and Geraghty (2010), Gratitude includes a broader life orientation towards noticing and appreciating the positive in the world. This life orientation is distinct from other emotions such as optimism, hope or trust⁴.

The interest in studying gratitude as an emotion or trait is very recent^{1,5}. Since 2000, research studies have consistently correlated gratitude with traits associated with positive emotional functioning, lower dysfunction and positive social relationships. Grateful people exhibit higher emotional balance as they are less likely to be angry, hostile, depressed and emotionally vulnerable and experience positive sentiments more often⁴. Studies have shown that grateful people are emotionally conducive to work life as they have higher openness to their feelings, ideas and values associated to the concept of well-being⁶. Although research on gratitude and physical health is yet to gain momentum, there are studies showing inverse correlation between stress and gratitude⁷. Gratitude leads to decreasing levels of stress over time⁸. Gratitude studies on cardiac patients report better sleep, less fatigue and lower levels of cellular inflammation⁹. Research findings indicate that because of its alignment toward positive well-being, gratitude is likely to deter the "negative triad" negative views about oneself, the world, and the future that describe symptoms of depression¹⁰. In a few studies, examining the effect of a dual component intervention - mindfulness and gratitude on psychological variables of well-being such as stress, depression, happiness etc.; improvement was observed with both the interventions of gratitude and mindfulness¹¹.

In this article, we do a comparative study of the trait of gratitude between practitioners of Heartfulness Meditation and non-meditators. Heartfulness is a simple, practical way to relax and meditate on the heart. Several research studies have been conducted showing the positive impact of Heartfulness Meditation in controlling stress, vital parameters, heart rate variability, etc.,¹².

Heartfulness has its roots in the age-old system of Raja Yoga. Its unique aspect is that it is aided by a subtle transmission "Pranahuti" from the energy source of the universe¹³. This transmission is an active catalyst helping the meditator to settle down and meditate effectively in a short time by drawing the attention inward. It helps the practitioner to be open and perceive things as they are. Another unique feature of Heartfulness Meditation is the rejuvenation process called "Cleaning" by which meditators, by their own will power, can remove impressions which are the seeds of disturbing thoughts. With regular practice of Heartfulness, one experiences calmness from within which leads to mind clarity, better focus, inner balance and true wellness of being¹⁴.

METHODOLOGY

The cross-sectional survey was conducted online from 1st Nov 2018 to 30th Nov 2018. Participants consisting of Heartfulness Meditators and non-meditators have anonymously filled up a Google form gratitude questionnaire which also includes socio demographic information such as age, gender, marital status, family systems, occupation and co-morbidity. Snowballing technique has been used to recruit more participants.

Participants have been excluded from the study for one of the following reasons: below 18 years of age, providing incomplete information or practicing other forms of meditation.

Measures

The strength of gratitude in a participant's character was assessed using the six-item Gratitude Questionnaire (GQ-6; McCullough *et al.*, 2002) which is the most widely used scale for assessing dispositional gratitude.

Responses to the questionnaire were provided using a 7-point Likert scale rated from 1 (strongly disagree) to 7 (strongly agree). Independent sample t test was performed to analyse whether there was a significant difference between the mean value of Heartfulness Meditators and non-meditators. The assimilated data was entered in the statistical package of social science (SPSS), version 21. Data has been conferred using inferential and descriptive statistics, percentages and frequencies.

RESULTS

Of 2,958 participants who filled up the questionnaire, 1,746 were meditators with at least one year of experience in Heartfulness Meditation and remaining 1,159 had no prior exposure to any form of meditation. 53 participants have been excluded from the analysis, of whom 13 were below eighteen years of age, 22 had not filled up the questionnaire appropriately and 18 were practicing other forms of meditation. The data has been grouped according to the demographic, social and health information reported, such as gender, age, marital status, occupation, nature of work, health, place of residence and family system.

Analysis from data gathered on the study population is shown in Table 1.

Variables	Groups	Frequency	Percentage (%)
Overall	Heartfulness Meditators	1746	60.1
Overall	Non-meditators	1159	39.9
Gender	Male	1543	53.1
Gender	Female	1362	46.9
	Young adult	1720	59.2
Age	Middle aged	966	33.3
-	Older adults	219	7.5
	Student	345	11.9
O	Working	1851	63.7
Occupation	Not working/Housewives	544	18.7
	Retired	165	5.7
T	Nuclear	1918	66.0
Type of family	Joint	987	34.0
	Heavy	15	0.5
Nature of work	Moderate	163	5.6
	Sedentary	2727	93.9
	Single	856	29.5
Marital status	Married	1968	67.7
	Separated	81	2.8
	Metro	2207	76.0
Place of residence	Urban	323	11.1
Place of residence	Sub urban	319	11.0
	Rural	56	1.9
Dhysical illness	Chronic physical illness	733	25.2
Physical illness	No illnesses	2172	74.8
Mental illness	Chronic mental illnesses	314	10.8
wiemai miness	No illness	2591	89.2

Statistical Analysis of study Population

Overall, meditators display a higher mean value in the gratitude index ($M\pm SD = 22.2566\pm 9.49761$) as well as a higher median (Box plot – Figure 1) as compared to non- meditators ($M\pm SD = 20.3581\pm 8.66894$) (p=0.000) (Table 2).

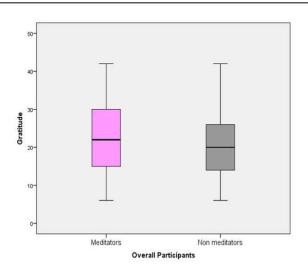


Figure 1 Distribution of GRATITUDE SCORE of the overall study population

Gender

The data sample analysed has a balanced gender population distribution: Male (53.1%) and female (46.9%) (Table 1).

Analysis of male participants shows that meditators have significantly higher gratitude scores $(M\pm SD = 21.8925\pm9.70866)$ than non-meditators $(M\pm SD = 19.9267\pm8.87250)$ (p=0.000).

In the case of females too, meditators show higher gratitude ($M\pm SD = 22.6457\pm 9.25666$) as compared to non-meditators ($M\pm SD = 20.8919\pm 8.38807$) (p=0.000) (Table 2, Figure 2).

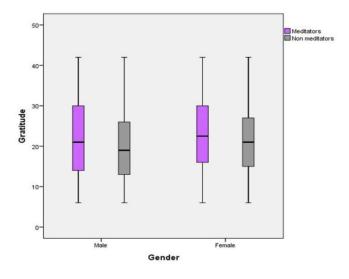


Figure 2 Distribution of GRATITUDE SCORE - analysis based on Gender

Age Range

Participants were categorized by age as young adults (ages 18-40 years; n =1720 (59.2%)), middle-aged adults (ages 41-65 years, n = 966 (33.3%)) and older adults (aged older than 65 years, n = 219 (7.5%)) (Table 1).

In young adults, meditators show a higher gratitude scale $(M\pm SD = 22.0810\pm9.07478)$ as compared to non-meditators $(M\pm SD = 20.8231\pm8.57645)$ (p=0.003).

In the middle-aged adults, meditators ($M\pm SD = 22.7459\pm 9.96568$) show a higher position in the gratitude index

as compared to non-meditators ($M\pm SD = 19.1433\pm 8.77418$) (p=0.000).

In the case of older adults, gratitude scores for meditators ($M\pm SD = 21.3152\pm 9.69133$) are higher than non-meditators ($M\pm SD = 19.4857\pm 9.16313$). However, the reading is not statistically significant (p=0.303) (Table 2).

Occupation

Occupational profiling indicates how a person is actively engaged most of the time. Working participants constitute 63.7% of the study population, followed by non-working participants such as homemakers (18.7%), students (11.9%) and retired individuals (5.7%). (Table 1).

Among working participants, meditators ($M\pm SD = 22.3785\pm9.67998$) show better gratitude scores than nonmeditators ($M\pm SD = 20.5222\pm8.93525$) (p=0.000).

In the other groupings too, gratitude levels are significantly higher in meditators than in non-meditators. In the case of students group alone, the difference is not statistically significant (p=0.103) (Table 2, Figure 3).

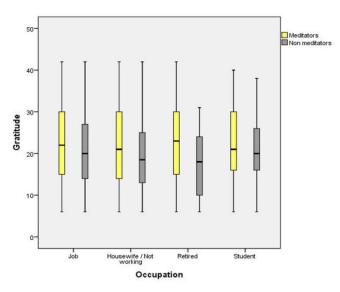


Figure 3 Distribution of GRATITUDE SCORE – analysis based on Occupation

Nature of work

Over 93.9% of the study population who took the questionnaire fell under the grouping of sedentary workers. In this category, gratitude index for meditators ($M\pm SD = 22.3037\pm9.48682$) is higher than non-meditators ($M\pm SD = 20.4290\pm8.61699$) (p =0.000). For occupations involving heavy or moderate physical activities the gratitude index is higher in meditators however it is not significant (Table 2).

Marital Status

The study population is analysed under three groupings in this group – single, married and separated.

The "single" grouping constitutes participants who have never been married. Here, the gratitude scores of meditators (M \pm SD = 21.9954 \pm 8.98378) is higher than non-meditators (M \pm SD = 21.1466 \pm 8.12534) (p=0.147).

In the "married" grouping, comprising of persons who are currently married; meditators ($M\pm SD = 22.2102\pm9.63418$) show a higher gratitude in comparison with non-meditators, ($M\pm SD = 19.9791\pm8.94698$) (p=0.000).

In the separated grouping, which is essentially participants who were once married and have parted ways with their partner: separated, divorced or widowed; meditators ($M\pm SD = 25.0161\pm 9.93007$) show higher gratitude index than non-meditators ($M\pm SD = 17.1053\pm 8.43863$) (p=0.002) (Table 2, Figure 4).

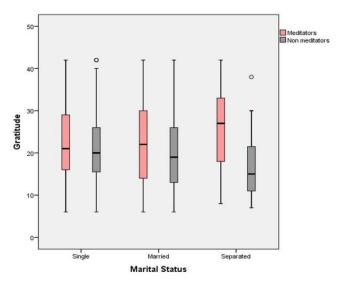


Figure 4 Distribution of GRATITUDE SCORE – analysis based on Marital Status

Family systems

When comparing, gratitude levels associated with family systems, both nuclear and joint family systems have been considered.

A nuclear family is presumed to have a single or two parent(s) and their children, while a joint family additionally includes one or more extended family members such as grandparents, uncle or aunt living under one roof; or more than one related families sharing a residence.

For participants from nuclear families the gratitude index score is higher in meditators ($M\pm SD = 22.4653\pm 9.38920$) than in non-meditators ($M\pm SD = 20.4620\pm 8.39958$) (p= 0.000).

In case of joint family also show higher scores for meditators ($M\pm SD = 21.8497\pm 9.70056$) than for non-meditators ($M\pm SD = 20.1570\pm 9.17515$) (p=0.006) (Table 2).

Place of Residence

The effect of the place of residence on the difference in gratitude scores has been examined for analysis. Of the four areas specified; metro, urban, sub-urban and rural, it is observed that in all cases the gratitude index of meditators is higher than those of non-meditators.

In the case of metro dwellers (76.0% of the participants) the difference in the gratitude index between meditators ($M\pm SD = 22.6903\pm 9.31560$) and non-meditators ($M\pm SD = 20.6192\pm 8.56798$) is significant (p=0.000). In other cases, the difference is not statistically significant (Table 2).

Chronic Illnesses

Of the overall study population, 25.2% reported suffering chronic physical illnesses such as diabetes, hypertension, asthma, coronary heart disease, etc. In this grouping, we observed a higher gratitude index in meditators ($M\pm SD = 22.4289\pm9.28855$) as compared to non-meditators ($M\pm SD = 19.9103\pm8.41478$) (p =0.000) (Table 2, Figure 5). The same observation is noted in the case of participants without chronic physical or mental illnesses.

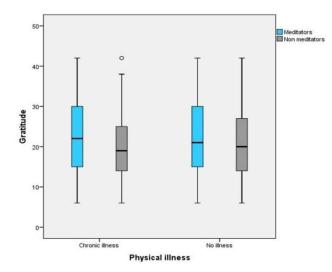


Figure 5 Distribution of GRATITUDE SCORE – analysis based on Physical illnesses

In our study, 10.8% of the population have reported chronic mental illnesses such as anxiety, depression, bipolar disorder, insomnia etc. The gratitude index of participants suffering from mental illnesses is higher in meditators ($M\pm SD = 22.4096\pm 9.56807$) as compared to non-meditators ($M\pm SD = 20.4762\pm 9.32585$), though not significant (p= 0.077) (Table 2, Figure 6).

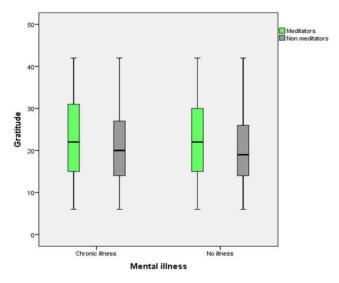


Figure 6 Distribution of GRATITUDE SCORE – analysis based on Mental illnesses

Box Plots: The centreline represents the Median. Rectangles represent the middle half of the data which goes from 25^{th} percentile to 75^{th} percentile. The whiskers go from minimum to maximum range. The open circles outside the whiskers indicate the outliers.

Table 2 Analysis of Gratitude level - Heartfulness Meditators				
Vs Non-Meditators				

Variable	Group	Heartfulness Meditators (Mean ± SD)	Non-meditators (Mean ± SD)	P value
Overall	Overall	22.2566 ± 9.49761	20.3581 ± 8.66894	0.000*
Gender	Male	21.8925 ± 9.70866	19.9267 ± 8.87250	0.000*
Gender	Female	22.6457 ± 9.25666	20.8919 ± 8.38807	0.000*
	Young adult	22.0810 ± 9.07478	20.8231 ± 8.57645	0.003*
Age	Middle aged	22.7459 ± 9.96568	19.1433 ± 8.77418	0.000*
	Aged	21.3152 ± 9.69133	19.4857 ± 9.16313	0.303
	Student	22.1695 ± 8.96423	20.6845 ± 7.87487	0.103
	Working	22.3785 ± 9.67998	20.5222 ± 8.93525	0.000*
Occupation	Not working /Housewives	21.7957 ± 9.27863	19.7965 ± 8.26459	0.012*
	Retired	22.6815 ± 9.37817	17.4333 ± 7.71333	0.005*
Type of	Nuclear	22.4653 ± 9.38920	20.4620 ± 8.39958	0.000*
family	Joint	21.8497 ± 9.70056	20.1570 ± 9.17515	0.006*
Nature of	Heavy	23.1000 ± 9.90454	25.2000 ± 11.69188	0.721
work	Moderate	21.3333 ± 9.69910	18.9143 ± 9.16316	0.109
WOLK	Sedentary	22.3037 ± 9.48682	20.4290 ± 8.61699	0.000*
Marital	Single	21.9954 ± 8.98378	21.1466 ± 8.12534	0.147
status	Married	22.2102 ± 9.63418	19.9791 ± 8.94698	0.000*
status	Separated	25.0161 ± 9.93007	17.1053 ± 8.43863	0.002*
	Metro	22.6903 ± 9.31560	20.6192 ± 8.56798	0.000*
Place of	Urban	20.3125 ± 9.88905	19.9456 ± 9.26755	0.733
residence	Sub urban	20.6463 ± 10.05002	19.3161 ± 8.94409	0.212
	Rural Chronic	22.5238 ± 10.89320	20.5714 ± 6.95484	0.467
Physical illness	physical	22.4289 ± 9.28855	19.9103 ± 8.41478	0.000*
miless	No illnesses Chronic	22.1980 ± 9.57046	$20.5075\ \pm 8.75177$	0.000*
Mental	mental	22.4096 ± 9.56807	20.4762 ± 9.32585	0.077
illness	illnesses No illnesses	22.2381 ± 9.49200	20.3437 ± 8.59009	0.000*

*significant p value (<0.05)

DISCUSSION

There have been several studies showing a positive correlation between meditation and gratitude. Some studies on meditation and positive psychology show that mindfulness facilitates gratitude¹⁵. Our study is a first of its kind. It is an observational and cross-sectional study to assess the direct impact of meditation on the trait of gratitude. To the knowledge of the authors, it is also the first ever study of a large population of diverse socio-demographic characteristics that influence personality traits.

Our results show that Heartfulness Meditators have higher mean value of gratitude in overall population; the same results have been observed across different sub-groups in the population. The group wise outcome of the study is examined in detail below.

In both male and female populations, meditators show higher gratitude expression than non-meditators. Previous studies suggest men as compared to women are less likely to feel and express gratitude. This is due to their inherent doubt on the tangible benefits from showing gratitude. In women there is a greater need to belong and develop social relationships through reciprocal dependencies¹⁶. Studies also indicate that there is a degree of reticence among men to openly express emotions^{16,17}. Among men, our study shows meditators to have higher gratitude levels than non-meditators. Heartfulness meditation

can be a suitable tool to enable men to develop a grateful disposition.

Age range analysis show that Heartfulness Meditation has increased gratitude for both young adults and middle age people. In the current materialistic world, the youth are vulnerable to loneliness and stress, which leads to depression. Gratitude brings about awareness to the youth as to how their lives are sustained and supported by others; it strengthens their feelings of being valued and of security¹⁸. The youth, who are grateful by disposition, have reported higher satisfaction with friends, family, their community and school¹⁹. Experiencing gratitude gives the youth the motivation to practise it more and more which results in enhancement of self-respect²⁰. Middleaged people experience many different forms of stress such as work pressure, financial pressure, family commitments and peer pressure²¹. Meditation is a good coping mechanism for stress¹³. Heartfulness meditation could offer dual benefits as it reduces stress as well as cultivates a grateful disposition; both aspects being crucial for the healthy development of mind.

Analysis of working population shows that meditators have higher gratitude outlook than non-meditators. Meditation is increasingly becoming a choice tool for an employee's personality development in many organizations. In the workplace, the ability to develop a grateful culture fosters teamwork over ego-centric view – a core value of a productive 'Employer - Employee relationship'²². The positive impact of Heartfulness Meditation makes a case for its consideration as 'Gratitude Intervention Tool' for working individuals to enhance productivity and happiness.

In our analysis of people with sedentary occupation, meditators show significantly higher gratitude than non-meditators. Heartfulness Meditators engaged in moderate and heavy occupations also show higher gratitude but the differences are not significant. Thinkers, managers, team leaders and those who are in positions of governance making important decisions for the organisation, typically have white collar jobs which places them under 'sedentary lifestyle'. In most cases, their lifestyle involves very less or no physical activity leading to life style diseases. Cultivation of gratitude in this subset of population yields positive benefit to both their psychological and physical health. Society also benefits when the personality of decisionmakers improves.

Heartfulness Meditation promotes higher gratitude in married, separated and single individuals. Research confirms that 'Being grateful' promotes social bonding and better relationships that are keys to a happier life²³. After the initial period of marriage, married couples often take each other for granted, leaving the partner emotionally unsatisfied and unfulfilled. Gratitude as a trait is therefore highly essential as it helps them to build longer lasting and more committed relationships²⁴. It is also a life support for separated people as it helps develop their personality for sustaining relationships.

Heartfulness Meditators show higher gratitude in both nuclear and joint families than non-meditators in our study. A grateful family is a harmonious and balanced family. A grateful parent inspires children to be grateful and contented.

The difference in gratitude scores of the population based on four areas of residence: metro, urban, sub-urban and rural has been examined. It is observed that in all cases the gratitude index of meditators is higher than those of non-meditators. Most of the study population are metropolitan dwellers who are likely to interact with people from diverse cultures and backgrounds. Our study results suggest that Heartfulness Meditation can be an effective tool for metropolitan dwellers to develop a grateful and open culture.

Our analysis revealed that meditators with chronic physical illness that are cardio, pulmonary, renal, neurological and metabolic in nature, and chronic mental illness such as anxiety, depression, bipolar, insomnia etc showed higher gratitude than non-meditators with similar illnesses. Cultivating gratitude in people with chronic illnesses has several positive influences. Higher gratitude develops inner peace and thankfulness which calms the sympathetic nervous system by reducing stress and tension. Studies show that meditation results in better health management for people with chronic illness as it lessens medical complications and dosage of medicines required²⁵. Probably, developing gratitude is one of the pathways in bringing these positive effects through meditation.

CONCLUSION

Gratitude is one of the traits of the heart. It positively influences physical, psychological and mental health and it is associated with life satisfaction and happiness. In our study, people practicing Heartfulness Meditation show higher levels of gratitude compared with non-meditators. This difference has been observed in different subsets based on age groups, gender, marital status, type of family, place of residence, occupation, chronic illnesses etc., which shows that heartfulness meditation promotes development of gratitude as a trait.

Heartfulness offers a heart-based meditation technique which tunes a person's mind to the heart and causes a paradigm shift on how one perceives life²⁶. It makes feeling grateful an internal experience of connectedness with oneself²⁷.

To harness the power of gratitude, one must remove all mind clutter and negative impressions such as worry, anxiety, depression and fear clogging up the mind. In Heartfulness Meditation this is done from the very root embedded in subconscious layers of the mind by the Heartfulness Rejuvenation process.

Heartfulness Meditation facilitates mind-mastery by gentle and natural regulation of the mind during meditation, resulting in crystal clear thinking which makes the practice of gratitude easy and natural.

References

- 1. Emmons RA, McCullough ME. Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life. J Pers Soc Psychol 2003;84(2):377-89.
- Allen S. Great Good Science Center. Berkeley: The Science of Gratitude. c2018. Available from: https://ggsc.berkeley.edu/images/uploads/GGSC-JTF_White_Paper-Gratitude-FINAL.pdf. [Last accessed on 2019 Apr 06].
- 3. Karns CM, Moore WE 3rd, Mayr U. The Cultivation of Pure Altruism via Gratitude: A Functional MRI Study of Change with Gratitude Practice. Front Hum Neurosci 2017;11:599.

- 4. Wood AM, Froh JJ, Geraghty AW. Gratitude and wellbeing: a review and theoretical integration. Clin Psychol Rev 2010;30(7):890-905.
- Wood AM, Joseph S, Linley PA. Coping Style as a Psychological Resource of Grateful People. J Soc Clin Psychol 2007;26(9):1076-93.
- 6. Joseph S, Wood A. Assessment of positive functioning in clinical psychology: theoretical and practical issues. Clin Psychol Rev 2010;30(7):830-8.
- Deutsch CJ. Self-reported sources of stress among psychotherapists. Prof Psychol Res Pr 1984;15(6):833-45.
- 8. Wood AM, Maltby J, Gillett R, Linley PA, Joseph S. The role of gratitude in the development of social support, stress, and depression: Two longitudinal studies. J Res Pers 2008;42(4):854-71.
- Mills PJ, Redwine L, Wilson K *et al.* The Role of Gratitude in Spiritual Well-being in Asymptomatic Heart Failure Patients. Spiritual Clin Pract (Wash D C) 2015;2(1):5-17.
- Evans J, Heron J, Lewis G, Araya R, Wolke D; ALSPAC study team. Negative self-schemas and the onset of depression in women: longitudinal study. Br J Psychiatry 2005;186:302-7.
- 11. O'Leary K, Dockray S. The effects of two novel gratitude and mindfulness interventions on well-being. J Altern Complement Med 2015;21(4):243-5.
- 12. Arya NK, Singh K, Malik A, Mehrotra R. Effect of Heartfulness cleaning and meditation on heart rate variability. Indian Heart J 2018;70:S50-5.
- 13. RajaAmarnath G, Marimuthu RS, Jenitha S *et al.* Impact of Heartfulness Meditation on Reducing Stress in Nursing Students: A Prospective Observational Study. Int J Med Res Health Sci 2018;7(1):98-109.
- 14. RajaAmarnath G, Latha V, Jenitha S *et al*. Evaluation of the Effects of Heartfulness Self Development Program on the Internal Mental Health of Nursing Students- A Prospective Observational Study. Int J Dev Res 2018;8(2):18873-78.
- Shapiro SL, Schwartz, Gary ER, Santerre C. "Meditation and positive psychology". In: Snyder CR and Lopez SJ. (eds.) Handbook of positive psychology, 1st ed. Oxford University Press: New York; 2002. p. 632-45.
- 16. Kashdan TB, Mishra A, Breen WE, Froh JJ. Gender differences in gratitude: examining appraisals, narratives, the willingness to express emotions, and changes in psychological needs.J Pers 2009;77:691-730.
- Deng Y, Chang L, Yang M, Huo M, Zhou R. Gender Differences in Emotional Response: Inconsistency between Experience and Expressivity. PLoS One 2016;11:e0158666.
- Duthely LM, Nunn SG, Avella JT. A Novel Heart-Centered, Gratitude-Meditation Intervention to Increase Well-Being among Adolescents. Educ res int 2017;2017:1-12.
- 19. Froh JJ, Yurkewicz C, Kashdan TB. Gratitude and subjective well-being in early adolescence: examining gender differences. J Adolesc 2009;32 (3):633-50.
- 20. Froh JJ, Sefick WJ, Emmons RA. Counting blessings in early adolescents: An experimental study of gratitude

and subjective well-being. J Sch Psychol 2008;46(2):213–33.

- 21. Chopik WJ, Newton NJ, Ryan LH, Kashdan TB, Jarden AJ. Gratitude across the life span: Age differences and links to subjective well-being. J Posit Psychol 2017;1-11.
- 22. Fehr R, Fulmer A, Awtrey E, Miller JA. The Grateful Workplace: A Multilevel Model of Gratitude in Organizations. Acad Manage Rev 2016;42(2):361-81.
- Caputo A. The Relationship Between Gratitude and Loneliness: The Potential Benefits of Gratitude for Promoting Social Bonds. Eur J Psychol 2015;11(2):323-34.
- Ragan EP. University of Denver Digital commons@DU. Denver: Electronic Theses and Dissertations. Thank you, dear: Examining the association between gratitude and relationship well-being. c2012. Available from: https://digitalcommons.du.edu/etd/535. [Last accessed on 2019 Apr 06].
- 25. Sirois FM, Wood AM. Gratitude uniquely predicts lower depression in chronic illness populations: A longitudinal study of inflammatory bowel disease and arthritis. Health Psychol 2017;36(2):122-32.
- 26. Kamlesh Patel. "Transmission". Designing Destiny The Heartfulness Way. Westland Publications Private Limited: Chennai; 2019. 28-33.
- 27. Kamlesh Patel. "Consciousness". Designing Destiny The Heartfulness Way. Westland Publications Private Limited: Chennai; 2019. 199-200.

How to cite this article:

Dr. Raja Amarnath G et al., 2019, Heartfulness Meditation Cultivates Gratitude. Int J Recent Sci Res. 10(05), pp. 32261-32267. DOI: http://dx.doi.org/10.24327/ijrsr.2019.1005.3433
