

Study the Effects of Vipassana Meditation on Increasing the Level of Psychological well-Being of People

Mina Qazinezam¹, Saeed Momtazi^{2*} and Nasrin Yaghubi³

¹Birjand Branch, Islamic Azad University, Birjand, Iran.

²Beheshti Medical Center, Department of Psychiatry,
Zanjan University of Medical Sciences, Zanjan, Iran

³Zanjan University of Medical Sciences, Zanjan, Iran.

doi: <http://dx.doi.org/10.13005/bbra/1565>

(Received: 11 October 2014; accepted: 14 December 2014)

Vipassana Meditation is considered to be the quintessence of the teachings from 2600 years back. It is non-sectarian and scientific technique of self-observation and truth-realization which leads to progressive better insight and positive mental health attributes, as also, inculcation of universal human values like love and goodwill, tolerance and compassion, peace and harmony, and spirituality. It's practical applications are discussed in this article. The main goal of this research was to study the effects of Vipassana on psychological well-being of people. In present research, two 200-person groups (experimental and control) were recruited. The experimental group included the participants of the 10-Day Vipassana courses. Before training, both groups were pre-tested then the experimental group was influenced by independent variable (Vipassana course). After the course finished both groups were tested again. Also, 3 months after training and applying this technique in daily life and interpersonal communication in experimental group, in order to pursue any expected changes, both groups have been tested for the third time. For statistical analysis of the results, the method of Mancova was used. The results showed that the experimental group after getting trained and practicing the technique regularly through their lives had obvious significant changes in 6 dimensions of autonomy, purposefulness in life, personal growth, environmental mastery, positive relationships with others and self-acceptance. So training and the regular applying of Vipassana technique had significant effect on increasing the level of psychological well-Being of our sample.

Key words: Vipassana, meditation, psychological well-Being, self-observation.

Vipassana meditation is a way to observe the reality, and to care for body and mind. It can be performed by any one. Meditation brings our awareness on the process of what is happening in the present (Ramesh Kapadia, 2012).

Vipassana is one of the most ancient techniques of meditation which means insight and realizing the truth. Practicing this technique helps,

one get released of old patterns of mind (mind conditioning) permanently and obtain insight without any dogma. In Vipassana, the person's mind is trained to focus her/his attention away from environmental triggers including persons, objects, and situation. Meditating person concentrate on breathing or body sensations, and instead of reacting to these sensations just observe them without any judgment. With practice the mind develops the faculty of awareness and equanimity. Vipassana is unique for the purification of mind at its deepest level (Wadhvani, 2012).

* To whom all correspondence should be addressed.
E-mail: drmomtazi@zums.ac.ir

In 1977, American Psychiatry Society declared "Meditation may facilitate the therapeutic process". This encouraged the researchers to work more on meditation (Wadhawani 2012).

Vipassana meditation is a non sectarian, scientific technique of self-observation and truth-realization leading to progressively better insight, personal growth and autonomy (positive mental health attributes) (Chokhani, 2009).

Available evidence from clinical studies as well as ancient existing manuscripts on this technique, introduces Vipassana as a practice which increases the level of consciousness, perception, and acceptance, patience and tolerance in people. This in turn is an effective factor for reducing mental and physical stress. (Wilber, Chandarimani, Verma, Behar, Fleischman 1998).

From ancient times, it was a question for many, that what is the main factor of welfare and mental health?

According to World Health Organization definition, perfect health is defined to specific level of physical, mental, social and emotional welfare which is not only the absence of disease or infirmity (Geneva Report, 2000).

A person who meditates daily, starts receiving innumerable benefits like:

- a) Improved physical, mental, emotional and spiritual life.
- b) Stress relief.
- c) Better management for anger, fear and frustration.
- d) Improved concentration.
- e) Inner peace, patience and happiness.
- f) Positive attitude towards people, events and life
- g) Develops qualities like sacrifice, compassion and wisdom
- h) general self-control
- i) Equanimous, stable and sharp mind, leading to better objective approach.
- j) More love, affection and sympathy for others.
- k) Control over thought process.
- l) Clarity of mind with fast decision making process.
- m) Improved quality of life (Anish Chandarana, 2012).

Considerable data is available documenting the multifarious bio-psycho-social

health benefits that is associated with the practice of Vipassana meditation (Vipassana Research Institute, 1986, 1990-a, 1990-c, 1995 & 2005).

Meditation and neuro-electric measures

Vipassana meditative practice involves the adoption of a mindful and receptive mental awareness, with concentration on present-moment sensations of the body and meta-cognitive reframing of ongoing experience as impersonal phenomena to be observed but not reacted to (Gunaratana 2002; Hart 1987; Lutz et al. 2007). EEG measures were obtained from experienced Vipassana meditators with conditions that contrasted the meditative state with a control cognitive condition designed to mimic "everyday thinking." The pattern of meditation-induced increase in parieto-occipital gamma activity, concomitant decrease in frontal delta power, and a shift to a more frontal distribution of theta activity suggests that both sensory processing and cognitive processing were altered during meditation comparing to the control state. However, the typically reported meditation state changes in the theta and alpha frequencies were not found (Cahn and Polich, 2006).

One of the considerable facts of this research is to study the importance and role of practicing the ancient technique of Vipassana in increasing the level of every factors of Ryff psychological well-being.

The clinical utility of Vipassana is thus considered to be more in terms of providing a general psychological pattern of positive mental states, which makes it a perfect tool for self-actualization and realization, a positive mental health measure indeed (Ayar & Chokhani, 1992; Chokhani RM, 1986, 1995, 1997; Khosla R, 1990; Vipassana Research Institute, 1986, 1990-a, 1990-c, 1995 & 2005).

Vipassana technique is a mind observing technique that reduces immersing the mind in the past (hence from remorse, regret and repentance feeling) and going to the future (subsequently expectations, anxieties and expectancies) and helps one to experience here and now directly with equanimity (Kahn 1982, Flieschman 1987, Srinivassan 1990, Hirai 1992, Morris 1992, Ohman 1998, Dohlan.J.R 2003).

Benefits of meditation focused on breathing

Breathing focused meditation can lead to

reducing stress, anxiety, fear, frustration, aggression and suicidal tendencies, improvement in memory and creativity, increasing problem solving capacity, improved self-confidence, ability to take right decisions, increasing Intelligence Quotient (IQ) and Emotional Quotient (EQ) as well as Spiritual quotient (SQ) (Rajiv Maru, 2012).

Vipassana meditation is a practice that involves focusing on present-moment sensory awareness with an equanimous and non-reactive mental set (Gunaratana 2002; Hart 1987). This tradition has served as the foundation for contemporary “mindfulness” meditation techniques such as the widely practiced mindfulness-based stress reduction (MBSR) currently used for clinical interventions (Davidson 2003; Grossman *et al.* 2004; Kabat-Zinn 1982, 2003). Development of greater awareness of and concomitant non-reactivity to interoceptive and exteroceptive sensory stimuli during formal Vipassana/mindfulness meditation is hypothesized to enhance self-awareness such that selective adaptive responding is facilitated at the expense of automated non-adaptive reactions, thereby promoting more successful management of stressful life situations (Hart 1987; Kabat-Zinn 2003; Lutz *et al.* 2007; Segal *et al.* 2002).

Over the past two decades for the first time a multidimensional definition for psychological well-Being was presented and many studies concerning the model of Ryff theory were accomplished. Some people engaged in studying the effect of age, gender, and socioeconomic situation on well-Being.

The defined dimensions in this theory are respectively:

1. Autonomy
2. Environmental mastery
3. Personal growth
4. Positive interpersonal relationships
5. Purpose in life
6. Self –acceptance

MATERIALS AND METHODS

The aim of this study was to examine the impact of training the Vipassana meditation technique and its regular application on increasing the level of psychological well-Being at any age, gender, and socioeconomic situation by using the

six-dimensional questionnaire of Ryff psychological well-Being.

Hypotheses

Training the Vipassana technique and practicing it improves the level of psychological well-Being of individuals over time.

Research Project

This research was accomplished by the general aim of training the Vipassana techniques and studying its effect on scales of psychological well-Being and is a quasi-experimental study of two groups.

Statistics and sample

The study participants were the participants in Vipassana 10-Day courses, at Vipassana Meditation Center in Karaj-Iran in 2010&2011. 200 persons as experimental group and 200 persons as control group were pretested before the course started. Beyond the test due to the drop of subjects the volume of experimental group was 150 and the volume of control group was 170 and in final test after 3 months the volume of both groups got into 57 persons.

Research tools

The main tool used in this study, - Ryff psychological well-Being questionnaire.

The Ryff Scales of Psychological Well-Being

The Ryff psychological well-Being questionnaire includes measuring of 6 dimensions: autonomy, purpose in life, personal growth, environmental mastery, positive relations with others and self-acceptance. This questionnaire consists of 84 multiple choice questions in which, 14 questions had been allocated to each factor. The subjects answered the questions in the 6 Likert scale answers (from strongly disagree to strongly agree). 47 questions were scored directly and 37 questions were scored in the reverse.

The resulting alpha in Ryff study was measured (0.83) for autonomy, (0.86) for environmental mastery, (0.85) for personal growth, (0.88 for positive relations with others, (0.88) for purpose in life, and (0.91) for self-acceptance. In the questionnaire used in this research, the choices were arranged disordered (the choices for every dimension were presented among other dimensions).

To answer each question, choosing one of the below items was allowed.

1. Strongly Disagree
2. Moderately Disagree
3. Slightly Disagree
4. Slightly Agree
5. Moderately agree
6. Strongly Agree

Performed method

The participants were asked to complete the questionnaires carefully; they were also assured that their personal information would be confidential. After completing the questionnaire the technique was taught through a 10-Day course, after passing the course over ten days the post-test (second test) was taken for both experimental and control group. 3 months after training, the follow up-test (third test) was taken in order to collect and interpret the data.

In this study, 200 women and men with no previous experience of practicing Vipassana technique attended a 10-Day course. Before beginning of any experiential training, both groups were pre-tested on the dependent variables, then experimental group were affected by the new independent variable (training of Vipassana technique) and after passing a 10-Day course, they were post-tested. Post-test has been done for the control group similarly after 10 days.

Vipassana meditation is taught in courses of ten days, open to everyone who sincerely wishes to learn the technique and who is fit to do so physically and mentally. During the ten days participants remain within the area of the course site, having no contact with the outside world. They refrain from reading and writing, and suspend any religious or any other practices, working exactly according to the instructions given. For the entire period of the course they follow a basic code of morality which includes celibacy and abstaining from all intoxicants, they also maintain silence among themselves for the first nine days of the course, also they are free to discuss meditation problem with the teacher and material problems with the management. During the first three and a half days the participants practice and exercise of mental concentration. This is preparatory to the technique of Vipassana proper, which is introduced on the fourth day of the course. Further steps within the practice are introduced each day, so that by the end of the course the entire technique has been presented in outline. On

the tenth day silence ends, and meditations make the transition back to a more extroverted way of life. The course concludes on the morning of the eleventh day. The experience of ten days is likely to contain a number of surprises for the meditator. The first is that meditation is hard work! The popular idea that it is a kind of inactivity or relaxation is soon found to be a misconception. Continual application is needed to direct the mental processes consciously in a particular way. The instructions are to work with full effort yet without any tension (Hart, William, 1987).

The majority of Vipassana practitioners have been taught in the tradition of Goenka (Hart 1987). This practice emphasizes attention absorption in subtle somatosensory awareness and associated open monitoring without mental or emotional reactivity to such sensory experience. The specific Vipassana meditative technique involves attention scanning of sensations throughout the body in an iterative and cyclic fashion, scanning body sensations from the top of the head to the toes and back again repeatedly, with the concomitant adoption of an attitude of detached observation and non-reactivity to any sensations and thoughts that may arise.

By spending valuable ten days in a course, the participants generally evaluate their effort effective and fruitful (Gillani, Smith, 2001).

Life in simple situations and quite different from what is experienced in everyday life, had special influence on people's mood.

Considering these determined disciplines with peace and silence are essential during the course.

Table 1. Descriptive characteristics of the subjects' age and education

	Maximum Minimum	Mean Value	Standard Deviations
Age	19-70	38	3.6
Education (years)	8-23	10	2.1

Table 2. Gender distribution of study subjects

Percentage	Number	Gender
61	34	Woman
39	23	Man
100	57	Total

In a ten-day course of Vipassana, the silence is seriously considered for 9 days, this silence includes avoid speaking and any interaction with others. Participants are only allowed to speak with teachers, if they have any question about the technique. The silence will be finished on the tenth day and the participants are allowed to talk to each others. In order to prepare individuals to deal with the outside world, the course is ended in the eleventh day and people can leave the Center after spending 10 complete days with quite different situation from what they experience in everyday life.

In the first post-testing on the tenth day, from the entire participants, 170 persons cooperated to complete the questionnaire for the second time. And the population of those who were available and wanted to complete the questionnaire after 3 months elapsed, were 57 persons.

Data analysis

Data obtained from the questionnaire survey was analyzed by using SPSS software and the comparison of mean values of groups was

made by Mancova. For descriptive statistics, mean value, standard deviation, minimum and maximum score obtained from individual in under studying variables was calculated.

RESULTS

Training of Vipassana technique causes the increasing of psychological well-Being of individuals.

To examine this hypothesis, multiple analysis covariance (Mancova) was used.

According to what is shown in table 3 and 4 training and practicing Vipassana, has increased the level of psychological well-Being. This effect was significant and it was permanent during three months follow up.

Also this data is consistent with the results of these researchers; Smith1975, Greenberg 1990, Carlson and et al. 1988, Alexander and et- al.

One strong points of this research is running a three month follow up after meditation course. This is important as it shows positive effects are not transient.

Table 3. Comparing the post-test of psychological well-being in 2 groups with the control of pre-test effect

Resource of Variables	Variables	Df	F	Value-P	Statistical Power	Coefficient Size
Pre-test	Positive Relationships	1	0.059	0.812	0.004	0.056
	Autonomy	1	1.373	0.260	0.84	0.195
	Environmental Mastery	1	0.979	0.338	0.61	0.153
	Personal Growth	1	0.663	0.428	0.042	0.119
	Purpose In Life	1	2.443	0.139	0.140	0.310
	Self Acceptance	1	0.086	0.774	0.006	0.059
Experimental-	Positive Relations With Others	1	3.913	0.017	0.207	0.457
Control Group	Autonomy	1	8.634	0.010	0.365	0.784
	Environmental Mastery	1	3.751	0.006	0.105	0.236
	Personal Growth	1	2.697	0.017	0.144	0.233
	Purpose In Life	1	2.658	0.024	0.100	0.226
	Self Acceptance	1	7.728	0.014	0.340	0.739
Total Scale of Psychological Well-Being		1	7.728	0.14	0.340	0.739

Table 4. Comparing the follow up test of psychological of well-Being in 2 groups with the control of pre-test effect

Resource of Variables	Variables	Df	F	Value-P	Statistical Power	Coefficient Size
Pretest	Positive Relations With Others	1	11.442	0.004	0.402	0.890
	Autonomy	1	12.489	0.003	0.424	0.914
	Environmental Mastery	1	5.219	0.035	0.235	0.577
	Personal Growth	1	12.022	0.003	0.414	0.904
	Purpose In Life	1	0.096	0.760	0.005	0.060
	Self Acceptance	1	4.437	0.049	0.198	0.513
Experimental-	Positive Relations With Others	1	2.598	0.012	0.135	0.313
Control Group	Autonomy	1	4.737	0.043	0.208	0.540
	Environmental Mastery	1	13.708	0.002	0.432	0.938
	Personal Growth	1	9.365	0.007	0.342	0.825
	Purpose In Life	1	5.871	0.029	0.281	0.620
	Self Acceptance	1	3.541	0.019	0.298	0.459
Total Scale of Psychological Well-Being		1	5.588	0.009	0.344	0.512

CONCLUSION

Considering the growth of mental disorders and psychosomatic diseases, applying such a technique as a positive psychology method with so many advantages, is recommended as a typical practice in order to promote mental health (D.B.Wadhwani, 2012).

By applying Vipassana one's sense of psychological well-Being and "Quality of life" improves. It's psychotherapeutic potential and benefits, as, also it's practical application in various human spheres is obvious (R.M.Chokhani, 2009).

People who meditate, obtain different attitude to everything. Meditation helps to improve in interpersonal relations, positive affection, and decreasing negativity and control over anger and fear (Sudhir Shah, 2012).

Growth and development of universal human values like love and good will, tolerance and compassion, peace and harmony and also spirituality is the result of Vipassana technique (R.M.Chokhani, 2009).

If we really want peace and happiness and to eliminate our miseries or if we want to have truth/self realization, we can use meditation (Sudhir V Shah, 2012).

S.N. Goenka Vipassana teacher who introduced this technique to the world says: "Vipassana helps people to move from narcissism

into mental maturity and altruism. This technique develops concentration facilitates purification of mind and eradicates the defilements and impurities of mind from the deepest level".

According to previous researches in this area, significant changes which are observable by applying this technique in different dimension of life can contrive significant positive changes in social level.

Limitations

Absence of investigating other effective variables on people's changes after finishing the research.

Recommendations for future research

- Longer-term follow up in changes of people's characteristics over time with perseverance in this technique.
- Studying demographic features (gender, age, education, socioeconomic situation, etc) probable effect on how this technique influences people
- Studying other effects of this technique on other human mental and physical functions.
- Teaching Vipassana technique to children in one-day and three-day courses for school students.

*. S.N. Goenka, venerable Vipassana teacher who introduced this technique to the world. Due to his valuable efforts, today Vipassana is taught at more than 165 centers in 55 languages all over the world.

REFERENCES

1. Ayyar K.S. & Chokhani R.M., A Review of Literature & Research on the Therapeutic Actions of Vipassana Meditation, Paper presented at the 23rd Annual Conference of the Indian Psychiatric Society-West Zone, Baroda, 1992.
2. Cahn BR, Polich J. Meditation (Vipassana) and the P3a event-related brain potential. *Int J Psychophysiol.* 2009; **72**: 51–60. doi: 10.1016/j.ijpsycho.2008.03.013. [PMC free article] [PubMed] [Cross Ref]
3. Cahn BR, Polich J. Meditation states and traits: EEG, ERP, and neuroimaging studies. *Psychol Bull.* 2006; **132**: 180–211. doi: 10.1037/0033-2909.132.2.180. [PubMed] [Cross Ref]
4. Chandarana, Anish., Why Doctors and Professionals Need To Meditate More? Meditation Must Book, First Edition 2012; 2012.
5. Chokhani R.M., Vipassana in Psychiatry, Paper presented at the 38th Annual Conference of the Indian Psychiatric Society, Jaipur, 1986.
6. Chokhani R.M., Vipassana Meditation and Positive Mental Health, *Bombay Psychologist*, 1995; **12**(1-2): 43-47.
7. Chokhani, R.M., *Spirituality & Mental Health: Reflections of the Past Applications in the Present Projections for the Future*, published by a special Task Force of the Indian Psychiatric Society and released at its Annual Confrance, 2009.
8. Clarke, P. J., Marshall, V. W., & Ryff, C. D., Measuring psychological well-being in the Canadian Study of Health and Aging. *International Psychogeriatrics*, 2001; **13**: 79-90.
9. Davidson RJ. Affective neuroscience and psychophysiology: toward a synthesis. *Psychophysiology.* 2003; **40**: 655–665. doi: 10.1111/1469-8986.00067. [PubMed] [Cross Ref]
10. Fleischman P.R., *Cultivating Inner Peace*, Putnam, New York, 1997.
11. Fleischman P.R., “Vipassana: A Unique Contribution to Mental Health”, in Fleischman, 1999.
12. Goenka S.N., “Altruism: Quintessence of Religion” in “Issues of Biomedical Ethics”: Proceedings of the Festival of Life International Congress, Dec.1988, Bombay; Editors: Vas C.J. & de Souza E.J., Macmillan India Ltd., New Delhi: 1990, 95-102.
13. Gross, J. J., & John, O.P., Individual differences in two emotion regulation processes, 2003
14. Gunaratana H. *Mindfulness in plain English*. Boston, MA: Wisdom Publications; 2002.
15. Hart W., *The Art of Living: Vipassana Meditation as taught by S.N. Goenka*, Harper & Row, New York, 1987.
16. Kabat-Zinn J. An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: theoretical considerations and preliminary results. *Gen Hosp Psychiatry.* 1982; **4**: 33-47. doi: 10.1016/0163-8343(82)90026-3. [PubMed] [Cross Ref]
17. Kabat-Zinn J. Mindfulness-based interventions in context: past, present, and future. *Clin Psychol Sci Pract.* 2003; **10**: 144-158. doi: 10.1093/clipsy/bpg016. [Cross Ref]
18. Kapadia, Ramesh., *Meditation Simplified, Meditation Must Book*, First Edition 2012.
19. Khosla R., *Psychological Benefits of Vipassana Meditation*, M.D. (Psychiatry) Thesis, University of Poona, Poona, 1990.
20. Lutz A, Dunne JD, Davidson RJ. Meditation and the neuroscience of consciousness. In: Zelazo PD, Moscovitch M, Thompson E, editors. *The Cambridge handbook of consciousness*. Cambridge, UK: Cambridge
21. Maru, Rajiv., *Meditation for Children, Meditation Must Book*, First Edition 2012.
22. Ryff, C. D. , Possible selves in adulthood and old age: A tale of shifting horizons. *Psychology and Aging*, 1991; **6**: 286-295.
23. Ryff, C. D., Beyond Ponce de Leon and life satisfaction: New directions in quest of successful aging. *International Journal of Behavioral Development*, 1989; **12**: 35-55.
24. Ryff, C. D., Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 1989; **57**: 1069-1081.
25. Ryff, C. D., Psychological well-being in adult life. *Current Directions in Psychological Science*, 1995; **4**: 99-104.
26. Ryff, C. D., Psychological well-being. In J. E. Birren (Ed.), *Encyclopedia of gerontology: age, aging, and the aged* (pp. 365-369). San Diego, CA: Academic Press, 1996.
27. Ryff, C. D., Life course profiles of positive mental health in women. In E. Blechman & K. Brownell (Eds.), *Behavioral medicine for women: A comprehensive handbook* (pp.183-188). New York: Guilford Publications, 1997.
28. Ryff, C. D., & Essex, M. J., The interpretation of life experience and well-being: The sample case of relocation. *Psychology and Aging*, 1992; **7**: 507-517.
29. Ryff, C. D., & Heidrich, S. M., Experience and well-being: Explorations on domains of life and

- how they matter. *International Journal of Behavioral Development*, 1997; **20**: 193-206.
30. Ryff, C. D., & Keyes, C. L. M., The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 1995; **69**: 719-727.
 31. Ryff, C. D., & Singer, B., Flourishing under fire: Resilience as a prototype of challenged thriving. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 15-36). Washington, D.C., US American Psychological Association, 2003.
 32. Ryff, C. D., & Singer, B., Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, 1996; **65**: 14-23.
 33. Ryff, C. D., & Singer, B., The contours of positive human health. *Psychological Inquiry*, 1998; **9**: 1-28.
 34. Ryff, C. D., & Singer, B., From social structure to biology: Integrative science in pursuit of human health and well-being. In: C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 541-554). London: Oxford University Press, 2002.
 35. Ryff, C. D., Keyes, C. L. M., & Hughes, D. L., Status inequalities, perceived discrimination and eudaimonic well-being: Do the challenges of minority life hone purpose and growth? *Journal of Health and Social Behavior*, 2003; **44**: 275-291.
 36. Ryff, C. D., Keyes, C. L. M., & Hughes, D. L., Psychological well-being in MIDUS: Profiles of ethnic/racial diversity and life course uniformity. In O.G. Brim, C.D. Ryff, & R.C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife* (Chicago: University of Chicago Press, 2004. pp. 398-422).
 37. Ryff, C. D., Lee, Y. H., Essex, M. J., & Schmutte, P. S., My children and me: Mid-life evaluations of grown children and of self. *Psychology and Aging*, 1994; **9**: 195-205.
 38. Ryff, C. D., Singer, B. H., Wing, E., Elective affinities and uninvited agonies: Mapping emotion with significant others onto health. In C. D. Ryff & B. H. Singer (Eds.), *Emotion, social relationships, and health* (pp. 133-175). New York: Oxford University Press, 2001.
 39. Ryff, C. D., Singer, B., & Palmersheim, K. A., Social inequalities in health and well-being: The role of relational and religious protective factors. In O.G. Brim, C.D. Ryff, & R.C. Kessler (Eds.), *How healthy are we? A national study of well-being at midlife* (pp. 90-123). Chicago: University of Chicago Press, 2004.
 40. Ryff, C. D., Singer, B., Seltzer, M. M., Pathways through challenge: Implications for well-being and health. In L. Pulkkinen & A. Caspi (Eds.), *Paths to successful development: Personality in the life course* (pp. 302-328). New York, N.Y., US: Cambridge University Press, 2002.
 41. Ryff, C.D., Kwan, C.M.L., & Singer, B., Personality and aging: Flourishing agendas and future challenges. In J.E. Birren & K.W. Schaie (Eds.), *Handbook of the psychology of aging*, 5th edition (pp.477-499). San Diego: Academic Press, 2001.
 42. Ryff, C.D., Magee, W.J., Kling, K.C., & Wing, E.H., Forging macro-micro linkages in the study of psychological well-being. In C. D. Ryff & V. W. Marshall (Eds.), *The self and society in aging processes* (pp.247-278). New York: Springer, 1999.
 43. Ryff, C.D., Singer, B.H., & Love, G.D., Positive health: Connecting well-being with biology. *Philosophical Transactions of the Royal Society of London*, 2004; **359**: 1383-1394.
 44. Schmutte, P. S., & Ryff, D. C., Personality and well-being: is the connection? *Journal of Personality and Social Psychology*, 1997; **73**: 549-559.
 45. Segal ZV, Williams JMG, Teasdale JD. *Mindfulness-based cognitive therapy for depression: a new approach to preventing relapse*. New York: Guilford Press; 2002 University Press; 2007
 46. Shah, Sanjiv., *How Vipassana Meditation Would Benefit Doctors*, Meditation Must Book, First Edition 2012.
 47. Shah, Sudhir V., *The Art and Science of Meditation*, Meditation Must Book, First Edition 2012.
 48. Vipassana Research Institute, *A Reader: International Seminar on Vipassana Meditation*, December 1986, Vipassana International Academy, Igatpuri, 1986.
 49. Vipassana Research Institute, *A Reader: Seminar on "Vipassana Meditation, Relief from Addictions, Better Health"*, November 1989, Vipassana International Academy, Igatpuri, 1990-a.
 50. Vipassana Research Institute, *Abstracts of Scientific Papers: International Seminar on "Vipassana Meditation and Health"*, November 1990, Vipassana International Academy, Igatpuri, 1990-c.
 51. Vipassana Research Institute, *A Reader: International Seminar on "Vipassana: Its Relevance to the Present World"*, April 1994, Indian Institute of Technology, New Delhi, 1995.
 52. Vipassana Research Institute, *A Reader: International Seminar on "Dharma – Its True*

- Nature”, May 1995, Vipassana International Academy, Igatpuri, 1996.
53. Vipassana Research Institute., A Reader: Seminar on “Vipassana & Ayurveda”, October 2005, Vipassana International Academy, Igatpuri, 2005.
54. Wadhawani, D.B., Meditation Must Book, First Edition 2012.
55. World Health Organization, World Health Report 2000. Geneva, 2000.