

Vipassana Meditation and Heart Rates

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Abstract:

The term *Vipassana Meditation* has two components namely *Vi* and *passana*. '*Vi*' means perfectly, exactly, sincerely etc. And '*Passana*' means looking, observing, analyzing, self-introspecting, investigating, etc. It means observing oneself in a special way. The third one is on different point of view, "*The Vipassana means promotes conscious life style changes, enhances concentration of mind and simplify process deeper psychological introspection to bring about lifelong behavioral changes*" Above definitions have been expressing as *Vipassana Meditation* is a scientific technique of self-purification through observation or psychological introspection. The Heart rate is defined as the number of heartbeats per unit of time - typically expressed as beats per minute (bpm) - which can vary as the body's need for oxygen changes at the time of exercise or sleep. In an adult, resting heart rate is normally about 70 beats per minute. There are so many affecting factors on heart rates such as age, metabolic rate, respiration, body position, emotional state, stress and anxiety. The purpose of present research paper is to assess an effect of *Vipassana Meditation* on Heart Rate of participants. To fulfill purpose the researcher had taken randomly selected sample of 23 people. Imparted ten days course of *Vipassana Meditation* as intervention programme. Pre test-post test assessment of heart rate was taken place. Eventually the researcher has reached on conclusion such as positive impact of *vipassana meditation* on heart rate of participants.

Keywords: **Vipassana Meditation*, **Heart Rate*, **Intervention Programme*

I. INTRODUCTION

Throughout history, there are various traditions of meditation; all around the world today people are attracting toward it. Yoga, Kundalini, Patanjali, Oso, Transcendental Meditation, Sufi, Zen, Samatha, Vipassana and Satipatthana are some examples. These traditions have continued generation to generation without gap of practice. These are able to gives benefited to people. All these examples show that the practice of Meditation is not limited to one or two religions. Rather it is a common aspect of many religious traditions. Abraham Maslow (1964) his work on *Peak Experiences* is related to religious studies. Peak experiences are profound moments of love, understanding, happiness, or joy, when a person feels more whole, alive, self-sufficient and yet a part of the world, more aware of truth, justice, harmony, goodness, and so on. Self-actualizing people have many such peak experiences. The peak experience is a higher point of life, when the individuals believe they are at harmony with themselves and their surroundings (Maslow, 2008). The *Vipassana Meditation* able to get such as peak experience to her practitioners. In this research paper two main concepts are included. One is *Vipassana Meditation* and another is heart rate. The researcher has explained all main concepts in detailed on theoretical level as follows.

a. *Vipassana Meditation*:

Vipassana is a *Pali* word; literally it means to see things as they really are in their true nature, in their true characteristics of impermanence. The term *Vipassana Meditation* has two components namely *Vi* and *passana*. '*Vi*' means perfectly, exactly, sincerely etc. And '*Passana*' means looking, observing, analyzing, self-introspecting, investigating, etc.

It means observing oneself in a special way. There are several definitions of *Vipassana Meditation*. Some important and selective definitions researcher has given onward: "*Vipassana means to see (passati) things by their characteristic (visesena)*" (Goenka, 2008). Another definition is "*The Vipassana is a systematic observation of the entire mind-matter phenomenon through the medium of bodily sensations*" (Wilson, 2008). The third one is on different point of view, "*The Vipassana means promotes conscious life style changes, enhances concentration of mind and simplify process deeper psychological introspection to bring about lifelong behavioral changes*" (Kishore Chandiramani & Verma, 1998). Above all definitions have been expressing as *Vipassana Meditation* is a scientific technique of self-purification through observation or psychological introspection. It is a technique of purification of mind, eradication all negativities just as anger, hatred, greed, selfishness and egoism as a result of self-observation or introspection.

b. *Heart Rate*:

The heart of human being has a very important role play into pumping blood around the body. It cycle of continuously and regularly contracting then get experience of relaxation. The contraction of heart rate varies greatly and is affected by many factors, which are state of excitement, exercise, disease and medications. The normal resting heart rate is between 60 to 80 beats per minutes. Every individual is unique, therefore individual difference have found in measurement of normal resting heart rate. Whereas 60 to 80 beats per minutes are common. Somebody have heart rates more outside the range

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of common resting heart rate. Then they should seek opinion of medical expert. Heart rate is defined as *the number of heartbeats per unit of time - typically expressed as beats per minute (bpm) - which can vary as the body's need for oxygen changes at the time of exercise or sleep.* In an adult, resting heart rate is normally about 70 beats per minute. However, the heart can beat up to three times faster—at more than 200 beats per minute when a person is exercising energetically. Younger people have faster resting heart rates than adults do. The normal heart rate is about 120 beats per minute in infants and about 100 beats per minute in young children. There are so many affecting factors on heart rates such as age, metabolic rate, respiration, body position, emotional state, stress and anxiety.

II. OBJECTIVES OF THE STUDY

1. To study an effects of Vipassana Meditation on heart rate.
2. To find the sex differences in terms of heart rate.

III. HYPOTHESES

1. There is no significant difference between pre-test and post-test in terms of heart rate after imparting vipassana meditation intervention programme.
2. There is no significant difference between male and female in terms of heart rate after imparting vipassana meditation intervention programme.

IV. SAMPLE

The present study was conducted on 23 male and female comprised from shirpur, Dist-Dhule. The age was between 21 to 60 years old. Out of the 23 participants 9 females and 14 were the males. The researcher has informed all rules and regulations of ten days course of vipassana meditation to all participants. One day before beginning of ten days Vipassana Meditation course, all participants were measured heart rates. Again all participants were measured on the same tests after completing ten days.

V. RESEARCH TOOL

The researcher has measured 'Heart Rates' of all participants with the help of Doctor. The stethoscope was a tool for used measurement of heart rate.

VI. DESIGN

In this present research paper the researcher has used Pre-Test Post-Test Control group design. Before intervention programme pre-test assessments were taken place. After the pre assessments, the ten days Vipassana Meditation intervention program (Ten days) was imparted to all participants. Finally post assessments were carried out after completing intervention programme.

VII. RESULTS AND DISCUSSION

The purpose of present study was to find out an effect of Vipassana Meditation on Heart Rate. To fulfill this purpose researcher was imposed the ten days Vipassana Meditation course to all 23 participants. Pre-test and post-test scores

were collected on the basis of selected variable. Results were analyzed by using the Statistical Package of the Social Sciences for Window (SPSS PC-19 version). The details of the table wise results and discussion researcher has given below.

Table-1: Showing mean, SD and 't' ratio for heart rate between pre-test and post-test scores of minor depressive cases.

Sr. No.	Group	Variables	Mean	SD	Std. Error Mean	't'	P
1	Pre Test	Heart Rate	89.52	15.37	1.38	6.30*	>0.01
2	Post Test	Heart Rate	81.44	11.90	1.06	*	
**P<0.01							

The above both tables No. 1 showing the difference between pre-test and post-test assessment score of Heart Rate variables. The pre-test mean of Heart Rate is 89.52 and SD is 15.37, and post-test mean of Heart Rate is 81.44 and SD is 11.90. The obtained 't' value of Heart Rate is 6.30 ($t = 6.30 > 2.61$) which is significant at 0.01 level. Its mean the Vipassana Meditation has positive impact on heart rate. All participants were emotional problem; hence the heart rate was high in the pre-test. The Vipassana Meditation brought changes in emotional state of its followers. Before Vipassana intervention programme the participants had fearful, anxious, aggressive, low confidence about their self and imbalance thinking. The emotional instability converted into the calmness and stable emotional states. Heart Rate is also depended on the thinking process and emotional state of mind. "Happiness is determined more by one's state of mind than external events" (Culter H.C.,1999). Hence, there is space to say the reduction of Heart Rate in post-test assessment is a result of intervention programme. "Our immune system may work better when we are optimistic. Evidence suggests that optimists live longer than pessimists" (Seligman, Martin, 2006). In any situation, the followers of Vipassana Meditation try to maintain equanimity, the balance of the mind. In the case of anxiety, stress and disease, peace and equanimity of mind will help.

The first hypothesis-*'There is no significant difference between pre- test and post-test in terms of heart rate and blood pressure, after imparting Vipassana Meditation intervention program'* was rejected. This result is consistent with the finding reported by Fleischman (1991), Chokhani, R.M. (2010), Armen Hareyan (2006), William R., Miller and Carl E. Thoresen (2003). They found that the heart rate decreased significantly after imparting Vipassana Meditation intervention program.

Table-2: Showing Mean, SD and 't' Ratio pre-test & post-test for Heart Rate on total sample for Male and Female.

Variables	Test	Sex	N	Mean	SD	Std. Error Mean	't'	p	Sig. Level
Heart Rate	Pre Test	Male	14	88.39	15.10	2.22	-0.17*	<0.05	NS
		Female	09	88.85	14.11	2.03			
	Post Test	Male	14	80.83	11.89	1.17	-0.13*	<0.05	NS
		Female	09	81.72	13.11	1.89			
*P<0.05									

Table No. 2 showing the male and females do not differ on Heart Rate. The pre-test mean of male's participants on heart rate is 88.39 and females participants pre-test mean is 88.85. The obtained 't' value of male and female participants on pre-test is 0.17 ($t = -0.17 < 1.68$) which is not significant at 0.05 level. Similarly, the post-test male participant's mean score is 80.83 and female participant's mean score on heart rate is 81.72. Whereas the calculated 't' value of male and female participants on post-test is 0.43 ($t = 0.43 < 1.68$) which is not significant at 0.05 level. Its mean there is no significant difference between male and females participants on pre and post-test assessment program in term of heart rate. This finding is supported to second hypothesis which is 'Male and female do not differ on heart rate.' This result is consistent with the finding reported by Fleischman (1991), Chokhani, R.M. (2010), Armen Hareyan (2006), William R., Miller and Carl E. Thoresen (2003). They found that the male and female significantly not differ on heart rate after imparting Meditation.

VIII. CONCLUSIONS, LIMITATIONS & SUGGESTIONS

1. There is a significant difference between pre-test and post-test scores participants in terms of Heart Rate due to Vipassana Meditation intervention programme.
2. There is no significance difference between pre-test and post-test scores of participants in terms male and female gender difference for Heart Rate and after imparting Vipassana Meditation Intervention Programme.
3. Certain other variable might have played significant role if taken consideration viz. occupational status, Socio-economic and educational status of participants.
4. Subjects of the present study were literate and educated. The illiterate and uneducated were not considered.
5. The present study was conducted on only one group but further study should be conducted on two groups.

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