

Effect of Hands on Reiki on Perceived Stress and Subjective Wellbeing among Software Professionals in Bangalore

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Abstract—The present study aimed to examine the efficacy of Hands on Reiki on Perceived Stress and Subjective-wellbeing among software professionals. 60 software professionals from a software firm situated at Bangalore who met the inclusion exclusion criteria were taken up for the study. Sample was divided into two groups - experimental and control group (30 in each group). The intervention was carried out for 21 days for the experimental group and the control group was not given any intervention. Both groups were assessed at two time intervals, pre and post-assessment. The Perceived Stress Scale (PSS-14), WHO (five) Wellbeing index and socio demographic checklist was used to assess the participants of both the groups. The obtained data were analysed using descriptive statistics and t-test to assess the significance level between the groups. Results of the study reveal that there is significant reduction in perceived stress and enhancement in subjective wellbeing from pre to post assessments in the intervention group.

Index Terms—Perceived stress, subjective wellbeing, hands on reiki, software professionals.

I. INTRODUCTION

Perceived stress and Subjective wellbeing at the workplace has gained a lot of importance in recent years in the domain of industrial psychology. Perceived stress was made popular by enormous research done by Dr Sheldon Cohen. It is popularly defined as viewed as an outcome variable measuring the experienced level of stress as a function of objective stressful events, coping processes and personality factors. Research has shown a huge spectrum of potential sources of stress at the workplace. Despite the different array of stressors employees are faced with, helping them combat stress is a tedious job from the organisational point of view. Subjective wellbeing refers to evaluations that people make about their lives. Such evaluations may represent judgments of one's life which is termed as life satisfaction or may reflect one's relative dominance of positive versus negative affect which is often referred to as happiness. Research has shown that subjective wellbeing is influenced by cognitive, contextual and affective factors. Stress being an affective factor is bound to influence the subjective wellbeing of a human being. Studies has also showcased the symbiotic relationship between stress and subjective wellbeing. Over time various stress management programs have been tried and tested and the effects are seldom long lasting as the programs may not cater to the

specific requirements of the employees as the workforce is always heterogeneous in India. Employee wellbeing is solely catered to fulfilling monetary needs of employees as far as company HR policies in India are concerned. This notion has been proved wrong in recent times due to market fluctuations and seems to be a major reason for high attrition and low productivity. In recent times, there has been a huge shift of the type of stress management programs being used in software companies. Owing credit to massive research being done on the efficacy of complementary and alternative medicine (CAM), incorporation of CAM has paved its way into successful stress management techniques. Ranging from meditation to Ayurveda software companies are using a wide spectrum of CAM for its workforce. Reiki (Usui lineage) is also a CAM, it is a traditional Japanese healing modality categorized as energy medicine or biofield therapy by the National Centre for Complementary and Alternative medicine (NCCAM). Reiki practitioners help their patients to heal by placing their hands slightly above or lightly touching the patient's body at specific points. This is known as Hands on Reiki. By doing this the Reiki practitioner is channelling life force energy through his/her body into the body of the patient. This allows the body's natural healing energy to flow freely thereby facilitating healing. Although research involving Reiki as an energy healing therapy has not been extensive, the present study is being conducted to test whether Reiki can reduce Perceived Stress and enhance Subjective wellbeing of Software professionals.

II. OBJECTIVES

Based on the review of literature the objectives of the study were formulated as follows,

- To study the efficacy of Hands on Reiki in reducing perceived stress among software professionals
- To study the efficacy of Hands on Reiki in enhancing subjective wellbeing among software professionals.

III. HYPOTHESES

Null hypotheses have been considered for the current study since there was a dearth of studies in the limited review done by the researcher on the efficacy of Reiki intervention. Studies done on similar lines are sparse in the Indian context. The efficacy of reiki has been displayed extensively on physiological ailments, the methodologies used in these studies are very different as mostly bio markers of various ailments were used which is always quantitative by nature. In

the absence of data specific pertaining to intervention studies on the independent and dependent variables, null hypotheses were chosen for this study. The hypotheses considered for this study are stated below.

- Hands on Reiki has no significant effect in reducing perceived stress of software engineers.
- Hands on Reiki has no significant effect in enhancing subjective wellbeing of software engineers.

IV. RESEARCH DESIGN

Experimental design was adopted in this study.

V. METHOD

A. Sampling

The data for the study was collected in Bangalore from IT companies for software professionals with complaints of high stress. The sample of engineers was taken from Bangalore only based on the inclusion and exclusion criteria. The sample size was sixty. Thirty participants each was randomly assigned to the experimental group (hands on reiki group) and the control group.

B. Inclusion Criteria

- Male and Female engineers.
- Age 23 to 34 years.
- Ability to comprehend and write in English.
- Minimum of 12 months' work experience in an Organization.
- Minimum educational qualification- Bachelor of Engineering/Bachelor of Technology/ BCA/ BSC Computer science
- Employed in the IT industry.

C. Exclusion Criteria

- Presence of any chronic physical ailment or psychiatric disorder.
- Previous exposure to any behavioral intervention within the past 12 months.

D. Materials/Tools of the Study

- Socio-demographic Data Sheet: This form contained information such as name, age, sex, education, marital status and family type, nature of work and years of experience and any significant physical illness.
- Perceived Stress Scale (PSS) (Cohen, et al., 1983): Developed by Cohen, et al., (1983), is a global scale and identifies the factors influencing or influenced by stress appraisal. It is a 14 -item scale which measures the degree to which situations in one's life is appraised as stressful during the past month. There are seven negative and seven positive questions for which the subjects were required to choose from a scale of 5 alternatives 'never' 'almost never' 'sometimes' 'fairly often' 'very often' relating to their feeling of being stressed on a 0-4 scale. The 7 positive items were reverse scored and added up to the 7 negative items to get the total score. Higher scores indicate greater stress. PSS scores are obtained by reversing the

scores on the 7 positive items (e.g. 0=4, 1=3, 2=2) and then summing across all 14 items. Items 4, 5, 6, 7, 9, 10 and 13 are the positively stated items. Co-efficient alpha reliability for PSS is 0.84 with a test retest correlation of 0.85.

- WHO (Five) Well-Being Index (Dr. C. Bradely , WHO, 1998): WHO Well-Being Questionnaire (Appendix A: Questionnaire 6) is a brief, easy to administer, reliable and valid measure developed at WHO by Dr. C. Bradley (1998). The questionnaire consists of 5 items that measure both positive and negative aspects of well-being. It includes items related to health, marriage, peer relations, social support, and satisfaction with support, perceived personal control and self-esteem. The responses are dichotomous and framed in a Yes or No format. The keyed answers are scored as '1'. Higher scores indicate greater well-being. The WHO-5 Well-Being Index is a questionnaire that measures current mental well-being (time frame: the previous two weeks). The internal consistency of the scale is Cronbach's $\alpha = 0.87$. The test-retest reliability of this scale in Germany and Japan is Cronbach's $\alpha = 0.90$.

E. Statistical Tools

Individual variables were coded for computer analysis and analyzed using Statistical Package for Social Sciences (SPSS). The obtained data was analyzed using descriptive statistics and paired t-test to assess statistically significant difference within the group and between the groups before and after assessment.

F. Procedure

The investigator conducted a pre-assessment of perceived stress and subjective wellbeing on all participants. This was followed by the intervention was done by the investigator at the software firm campus. The intervention was carried out in a hall used for training programs and addressing group meetings. The investigator who is trained in reiki, gave hands on reiki to all participants. The hands-on reiki intervention was for 5 minutes daily for 21 days wherein the reiki healing was administered to the participants by placing both palms one inch above the head. This was done during work hours only. Each participant was permitted to choose their preferred time slots for healing. All participants strictly followed their healing time schedules during the tenure of the intervention program. The subjects were given Hands on reiki healing on swivel chairs (seated with spine erect and arms rested). The group was again assessed after 21 days (post assessment). The Control Group was not given any intervention however orientation to the study and their importance as a control group was communicated to those who provided their consent to be a part of the control group. Both the tools were administered on the group. The group was again assessed after 21 days (post assessment).

VI. RESULTS

Background information: The sample consisted of 60 Software IT professionals aged between 23 to 34 years. The sample had participants with age group ranging from 23 to 34.

All participants had a minimum of 12 months of work experience. The average work experience was 4 and half years and the maximum work experience were 12 years. The minimum family size was 2 and the maximum was 8. The sample reported to suffer highest from stressors pertaining to their work. The groups had similar views and beliefs about complementary and alternative medicine (CAM). The sample was aware about the benefits of various CAM modalities. On the contrary the sample did not have bare minimum knowledge of Reiki and its healing potential. The results have been obtained after the collected data was scored and put to statistical analysis in order to test the formulated hypothesis of the study.

TABEL I: INDICATES THE T-TEST RESULTS SHOWING THE EFFECT OF HANDS ON REIKI ON PERCEIVED STRESS

Groups	N	M	S.D	t	Sig
Experimental and Control Groups before intervention					
E.G	30	30.07	6.81	1.83	0.592
C.G	30	28.23	7.15		
Experimental group					
Before	30	30.07	6.81	4.85	0.001
After	30	23.23	6.02		
Control group					
Before	30	28.23	7.15	1.84	0.076
After	30	26.47	5.51		
Experimental and Control Groups after intervention					
E.G	30	23.23	6.02	3.233	0.16
C.G	30	26.47	5.51		

TABEL II: INDICATES THE T-TEST RESULTS SHOWING THE EFFECT OF HANDS ON REIKI ON SUBJECTIVE WELLBEING

Groups	N	M	S.D	t	Sig
Experimental and Control Groups before intervention					
E.G	30	49.73	19.53	4.40	0.001
C.G	30	54.13	20.06		
Experimental group					
Before	30	49.73	19.53	4.21	0.001
After	30	66.53	15.66		
Control group					
Before	30	54.13	20.06	2.66	0.05
After	30	61.87	14.88		
Experimental and Control Groups after intervention					
E.G	30	66.53	15.66	4.66	0.001
C.G	30	61.87	14.88		

Table I shows that the Experimental group has obtained a mean of 30.07 and S.D of 6.81 before intervention and mean of 23.23 and S.D of 6.02 after intervention. The Control group has obtained a mean of 28.23 and S.D of 7.15 before intervention and mean of 26.47 and S.D of 5.51 after intervention. The obtained t-value 1.83 comparing the mean values of the experimental and control group before intervention is not significant at 0.05 level. While comparing the mean value of the Experimental Group, before and after

intervention, a t-value of 4.85 was obtained, which is significant at 0.001 level. Comparison between the mean values of the Control Group, before and after intervention gives 1.84 as the t-value, which is not significant at 0.05 level. The obtained t-value 3.233, comparing the mean values of Experimental group and control group after intervention is significant at 0.01 levels. Since the experimental group has consistently scored a significant lower mean than the control group, the alternate hypothesis “Hands on Reiki has a significant effect on Perceived stress among software professionals” is accepted.

Table II shows that the Experimental group has obtained a mean of 49.73 and S.D of 19.53 at pre-assessment level or before intervention and mean of 66.53 and S.D of 15.66 at post assessment level or after intervention. The Control group had obtained a mean of 54.13 and S.D of 20.06 at pre-assessment level and mean of 61.87 and S.D of 14.88 at post-assessment level. The obtained t-value of 4.400 comparing the mean values of the experimental and control group before intervention or at pre-assessment is significant at 0.001 level. While comparing the mean value of the Experimental Group, before and after intervention, a t-value of 4.213 was obtained, which is significant at 0.001 level. Comparison between the mean values of the Control Group, before and after intervention gives 2.665 as the t-value, which is significant at 0.05 level. The obtained t-value of 4.667, comparing the mean values of Experimental group and control group after intervention is significant at 0.01 levels. Since the experimental group has consistently scored a significant higher mean than the control group, the alternate hypothesis “Hands on Reiki has a significant effect in enhancing subjective wellbeing among software professionals” is accepted.

VII. DISCUSSION

A. Hands on Reiki Intervention on Perceived Stress

The first objective of this study was to check the efficacy of Hands on Reiki on perceived stress of software professionals. Before the intervention both the hands on reiki group and the control group had similar scores on perceived stress. Paired t tests demonstrated significant group differences on perceived stress for the hands on reiki group, on completion of the 21 day hands on reiki intervention period. These findings are in consensus with the study [1] which explored the long-term effects of energetic healing on symptoms of psychological healing and self-perceived stress. In this study participants were healed by hands on reiki , distance reiki and placebo reiki separately. Results showed that Hands on Reiki too had a significant effect on reducing stress in comparison with the control group. The current findings are further supported by results from a pilot study [2] where the effect of Reiki on work related stress of nurses was analyzed. Perceived stress scale was used as a tool for pre and post assessment. It was concluded that practicing Reiki more often by nurses can reduce perceived stress levels. This also indicates that the duration of intervention of 21 days as used in the current study, which is the usual time frame used by reiki practitioners to

check if reiki works for their clients is sufficient to bring down stress of the participants of the hands on reiki group. The results of this study are in congruence with the study [3], where in the effect of Reiki was tested on the heart rate homeostasis in noise stressed laboratory rats. It was concluded that Reiki is effective in modulating HR in stressed and unstressed rats, supporting its use as a stress-reducer in humans. The positive results of the current study can be attributed to the healing ability of touch. There is a lot of scientific evidence for the healing ability of touch on stress indicators like anxiety, glucose metabolism, blood pressure and heart rate. As Hands on Reiki uses touch as a medium to heal, it is similar to touch therapy and tactile touch intervention. The efficacy of touch therapy further accentuates to the efficacy of Hands on Reiki as well [4]. Most CAM modalities are quoted to be efficient based on the concept of the patient's belief [5]. The results of the current study could be due to the sample's belief in the healing power of Reiki. The current findings conflict results of a study [6] where in the study examined deficiencies in existing Reiki research by objectively measuring the effect of Reiki on physical and mental relaxation. It was concluded that there were no pre-test post-test differences on mental relaxation compared to other therapies. There was significant effect only for physical relaxation. The present results support findings of study [7], where in the effect of Reiki on biological markers of stress and anxiety was analysed. Results concluded that Reiki has a significant effect in reducing anxiety and decreasing systolic blood pressure thereby indicating a significant reduction in stress. The current findings and supportive studies mentioned indicate that Hands on Reiki can significantly reduce perceived stress.

B. Hands on Reiki Intervention on Subjective Wellbeing

The second objective of this study was to check the efficacy of Hands on Reiki on subjective wellbeing of software professionals. On completion of the 21-day distance reiki intervention period, t tests demonstrated significant group differences on subjective wellbeing for the hands on reiki group. These findings are in consensus with the study [8] who found that reiki intervention was beneficial in improving mood and wellbeing. The current results are further supported by the findings of another study [9]. It was concluded that Reiki intervention enhanced well-being on pain and anxiety in patients attending a day oncology and infusion services unit. The present results could also be because of practitioner-patient bonding by virtue to hands on reiki healing daily over a period of twenty-one days. This observation is in correspondence with the findings of a study [10] where in heightened state of awareness and inner wellbeing was reported by participants. Authors concluded that a sense of connectedness felt by the participants towards an unfamiliar practitioner indicates that practitioner patient bonding is an important factor in healing. Participants of the experimental group were very compliant with their attendance of the intervention sessions which displays their openness to this healing methodology. This openness could be a causative factor for the enhancement of their subjective wellbeing

scores. This assumption is supported by the findings of a study by Thornton, wherein effects of Reiki was assessed on anxiety and wellbeing among female nursing students. The author concluded that the more open subjects are to Reiki treatment the greater was their perception of healing. The positive results of the current study can be attributed to the healing ability of touch. This assumption is in sync with a study [11] on improving the wellbeing of nurse through healing touch training, the study displayed enhanced wellbeing post training. According to a study [12] subjective wellbeing can be influenced by cognitive, affective and contextual factors. The control group has statistically significant difference between the mean scores, this could be due to the influence of external variables like cognitive and contextual factors which interfered with the participant's subjective wellbeing which could not be captured by the experimenter.

VIII. CONCLUSION

The current study reveals that Hands on Reiki reduces perceived stress as compared with controls. Hands on Reiki enhances subjective wellbeing in the experimental group, there could be other factors responsible for the changes in subjective wellbeing in the control group. The benefit of Hands on Reiki is proven to be effective with five minutes healing daily over a brief period of twenty-one days for software professionals. The results of this study demonstrate that Hands on Reiki has potential to be used as an effective treatment to handle stress and enhance subjective wellbeing and there is scope for future research in this domain.

REFERENCES

- [1] A. G. Shore, "Long-term effects of energetic healing on symptoms of psychological depression and self-perceived stress," *Alternative Therapies in Health and Medicine*, vol. 10, no.3, pp. 42-48, 2003.
- [2] C. L. Cuneo, M. R. C. Cooper, C. S. Drew, C. Naoum-Heffernan, T. Sherman, K. Walz, and J. Weinberg, "The effect of Reiki on work-related stress of the registered nurse," *Journal of Holistic Nursing*, vol. 29, no. 1, pp. 33-43, 2011.
- [3] A. L. Baldwin, C. Wagers, and G. E. Schwartz, "Reiki improves heart rate homeostasis in laboratory rats," *The Journal of Alternative and Complementary Medicine*, vol. 14, no. 4, pp. 417-422, 2008.
- [4] M. Henricson, A. Ersson, S. Määttä, K. Segesten, and A. L. Berglund, "The outcome of tactile touch on stress parameters in intensive care: A randomized controlled trial," *Complementary Therapies in Clinical Practice*, vol. 14, no. 4, pp. 244-254, 2008.
- [5] J. A. Astin, "Why patients use alternative medicine: Results of a national study," *Jama*, vol. 279, no. 19, pp. 1548-1553, 1998.
- [6] D. Witte and L. Dundes, "Harnessing life energy or wishful thinking? Reiki, placebo reiki, meditation, and music," *Alternative & Complementary Therapies*, vol. 7, no. 5, pp. 304-309, 2001.
- [7] D. W. Wardell and K. F. Weymouth, "Review of studies of healing touch," *Journal of Nursing Scholarship*, vol. 36, no. 2, pp. 147-154, 2004.
- [8] D. Bowden, L. Goddard, and J. Gruzelier, "A randomised controlled single-blind trial of the efficacy of Reiki at benefitting mood and well-being," *Evidence-Based Complementary and Alternative Medicine*, 2011.
- [9] N. Birocco, C. Guillame, S. Storto, G. Ritorto, C. Catino, N. Gir, and L. Giaretto, "The effects of Reiki therapy on pain and anxiety in patients attending a day oncology and infusion services unit," *American Journal of Hospice and Palliative Medicine*, vol. 29, no. 4, pp. 290-294, 2012.
- [10] D. W. Wardell and J. Engebretson, "Biological correlates of Reiki Touchsm healing," *Journal of Advanced Nursing*, vol. 33, no. 4, pp. 439-445, 2001.

- [11] R. Tang, C. Tegeler, D. Larrimore, S. Cowgill, and K. J. Kemper, "Improving the well-being of nursing leaders through healing touch training," *The Journal of Alternative and Complementary Medicine*, vol. 16, no. 8, pp. 837-841, 2010.
- [12] I. C. Galinh and J. L. Pais-Ribeiro, "Cognitive, affective and contextual predictors of subjective well-being," *International Journal of Wellbeing*, vol. 2, no. 1, 2012.



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