



RESEARCH ARTICLE

THE ROLE OF EMOTIONAL FREEDOM TECHNIQUE IN REDUCING STRESS AND ANXIETY AMONG B.SC. NURSING STUDENTS: FINDINGS FROM A QUASI-EXPERIMENTAL STUDY

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Abstract

Stress as well as anxiety have been found to be major problems for student nurses while they are in school. Many factors lead to this, including the emotional difficulties of caring for the sick and dying, growing job demands, insufficient staffing, higher patient acuity, a lack of administrative support, and a quickly evolving healthcare environment. This study aims to assess the Effectiveness of Emotional Freedom Technique on the level of Stress and Anxiety among B.Sc. Nursing Students studying in selected Nursing Colleges of Dehradun, Uttarakhand. A quantitative approach with quasi experimental nonequivalent Pre test Post test design was selected was used to assess the Emotional Freedom Technique on the level of Stress and Anxiety among B.Sc. Nursing Students. Purposive sampling technique was used, and sample size was 100. The study was conducted in Doon Institute of Medical Sciences, Sahaspur, Dehradun. The research tool consisted of three sections, Section A that is Demographic Variables, Section B that is Perceived Stress Scale and Section C that is the Hamilton Anxiety Scale. The data collected were analyzed and interpreted through descriptive and inferential statistics. When compared to the Pre test level of stress in the control group, the mean value is 19.48 with SD of 3.59 and Post-test mean value is 19.58 with SD of 3.50, the calculated 't' value of $t = -0.868$ was not found statistically significant at the $P < 0.05$ level. Whereas the Pre-test level of anxiety in the control group the mean value is 24.26 with SD of 6.42 and Post-test mean value is 24.72 with SD of 6.54, the calculated 't' value of $t = -3.773$ was found statistically significant at the $P < 0.05$ level. The study concludes that application of Emotional Freedom Technique minimized the stress and anxiety in B.Sc. Nursing students.

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Introduction:-

An Anxious Mind Can Not Exist in A Relaxed Body P- Edmund Jacobson, MD. Stress has been dubbed the 'Health epidemics of 21st century' by WHO. It is a common occurrence throughout the course of human life. Life puts pressure on us all the time. It is the way people respond to shifting circumstances and events in their lives on a physical and mental level. The bulk of the nursing curriculum consists of clinical training, stress and anxiety are frequently reported by nursing students during their academic career. Stress during this time can have a number of detrimental effects, including low academic achievement, increased levels of burnout, and decreased wellbeing. Anxiety is a severe and ongoing worry that obstructs day-to-day functioning. Its symptoms can include attempts to avoid the situation, physical fear reactions, and panic attacks. While feeling nervous in some situations is normal for students, some experience anxiety levels that are excessive for their age and developmental stage. Numerous strategies for nursing students to manage their stress have been proposed and evaluated. Strong support was given by Jones and Johnston (2000) for a multimodal strategy of stress reduction that included time management, problem solving, relaxation techniques, and other interventions. Subsequently, Craig's method changed as he began using Emotional Freedom Technique tapping, and other certified therapists added their own extent to the therapeutic methodology. According to Traditional Chinese Medicine (TCM) the human body contains over 2,000 acupoints. These acupoints are connected by meridians, or pathways, that allow life-force energy, also known as "chi," to flow.

This information is provided by Johns Hopkins Medicine. Standard Emotional Freedom Technique tapping typically incorporates nine acupoints on the face, hands, and body, according to Emotional Freedom Technique International. However, Emotional Freedom Technique tapping involves more than stimulating these acupoints - it also incorporates mental focus. Church feels that this works with patients with PTSD in a clinical setting: "In tapping sessions with a certified clinical Emotional Freedom Technique practitioner, the practitioner will remind you over and over again about the traumatic event, which lights up the neural pathways that carry the signals of adverse experiences." Tapping these acupoints at the same time during this exercise provides a soothing signal to the brain that may rapidly calm the body's stress response to that traumatic memory.

Materials and Methods:-

A quantitative research approach was used to assess the stress and anxiety level. The quasi-experimental non-equivalent Pre-test Post-test design was selected. Purposive sampling technique was used, and sample size was 100. The study was conducted in Doon Institute of Medical Sciences, Sahaspur, Dehradun. The research tool consisted of three sections, Section A that is Demographic Variables, Section B that is Perceived Stress Scale and Section C that is The Hamilton Anxiety Scale. The content validity was done by five experts in the field of Nursing. A two-week pilot study at Uttarakhand University was carried out to determine the reliability and feasibility of the study.

A total of four weeks were dedicated to the collection of data for the main study. Using the non-probability purposive sample approach, the researcher chose 50 B.Sc. Nursing third-year students for the experimental group and 50 B.Sc. Nursing fourth-year students for the control group. The participants provided written consent. On the first day, a pre-test was conducted using a Perceived Stress Scale and The Hamilton Anxiety Scale to evaluate the level of stress and anxiety in both groups. The experimental group was then given the Emotional Freedom Technique for 28 days. Next, the Post-test scores for both groups were evaluated. The data collected were analyzed and interpreted through descriptive and inferential statistics.

Result:-

Part I. The results show socio-demographic description of the study participants.

There was a total of 100 participants out of which 74% were females and 26% were males in the control and experimental group. 82% of participants were in the age group of 20-22 years in experimental group, whereas in control group majority of nursing students, that is 80% were in the age group of 21-23 years. Based on qualification, 50% participants were from B.Sc. nursing 3rd Year and another 50% were from B.Sc. nursing 4th Year. With respect to residence, the highest percentage (36%) of control group lived in Hostel and 44% of experimental group lived in Parent's Home. With regard to parental education 42% of fathers were Graduate and 34% mothers were Graduate in control group and 34% of fathers were Graduate and 28% of mothers were Graduate in experimental group.

With regard to parental occupation 26% of fathers were Shop & Market Sales Worker and 44% mothers were Unemployed in control group and 32% of fathers were Shop & Market Sales Worker and 42% of mothers were Unemployed in experimental group. With respect to family monthly income 60% participants fall under the category of 37325 – 62272 in Control Group and 62% participants fall under the category of 37325 – 62272 in Experimental Group. With respect to spiritual belief all the participants of control as well as experimental were believers. Based on type of institution, both groups were from private organisation. With regard to number of siblings 40% had 3 siblings in control group as well as experimental group. With regard to type of family 68% had nuclear family in control group and 70% had nuclear family in experimental group.

Part II. Assessment of Pre-test and Post-test level of stress and anxiety among B.Sc. Nursing

Students in experimental and control group.

N= 100

	Mean	SD	't' value	P value
PSS Pre-test	19.48	3.59	-0.868	0.389
PSS Post-test	19.58	3.50		
HAS Pre-test	24.26	6.42	-3.773	0.001*
HAS Post-test	24.72	6.54		

Table 1: Comparison of Pre-test and Post-test level of stress and anxiety Scores in Control Group.

Table 1 shows the comparison of Pre-test and Post-test scores of PSS and HAS in the control group. Statistical analysis was done using paired t-test which showed that there was no statistically significant difference between mean Pre-test and Post-test PSS scores in the control group ($P=0.389$). However, there was a statistically significant difference between mean Pre-test and Post-test HAS scores in the control group ($P<0.001$). The mean Post-test HAS score was significantly higher than mean Pre-test HAS score. However, the difference (0.54) was not deemed clinically significant. The comparison of the Pre and Post-test levels of stress in the control group showed that the Pre-test mean value of stress was 19.48 ± 3.59841 and the Post-test mean value of stress was 19.58 ± 3.49980 with the calculated 't' value was -0.868 at 49 and the Pre-test mean value of anxiety was 24.26 ± 6.42320 and the Post-test mean value of anxiety was 24.72 ± 6.54354 with the calculated 't' value was -3.773. This clearly shows that there was no significant difference between the Pre- test and Post-test (stress score) among B.Sc. Nursing students in control group.

	Mean	Std. Deviation	't' value	P value
PSS Pre-test	19.82	3.65	20.303	<0.001*
PSS Post-test	12.86	3.54		
HAS Pre-test	23.22	3.13	31.106	<0.001*
HAS Post-test	14.04	2.33		

Table 2: Comparison of Pre-test and Post-test level of stress and anxiety Scores in Experiment Group.

Table 2 shows the comparison of Pre test and Post test scores of PSS and HAS in the experimental group. It was observed that the Pre test mean value of stress was 19.82 ± 3.65 and the Post-test mean value of stress was 12.86 ± 3.53992 and Pre-test mean value of anxiety was 23.22 ± 3.12 and the Post-test mean

value of anxiety was 14.04 ± 2.32 . Statistical analysis was done using paired t-test which showed that there was a statistically significant difference between mean Pre-test and Post-test PSS scores in the experimental group ($P < 0.001$). It was observed that the mean Pre-test PSS score was significantly higher than the mean Post-test PSS score. This implies that the mean PSS score decreased significantly as a result of EFT. Similarly, there was a statistically significant difference between mean Pre test and Post test HAS scores in the experimental group ($P < 0.001$). It was observed that mean Pre-test HAS score was significantly higher than the mean Post-test HAS score. This implies that the mean HAS score decreased significantly as a result of EFT. This clearly shows that the stress and anxiety level decreased significantly as a result of Emotional Freedom Techniques.

Part III: Description of effectiveness of Emotional Freedom Technique on the level of stress and anxiety among B. Sc. Nursing students in Control and Experimental group.

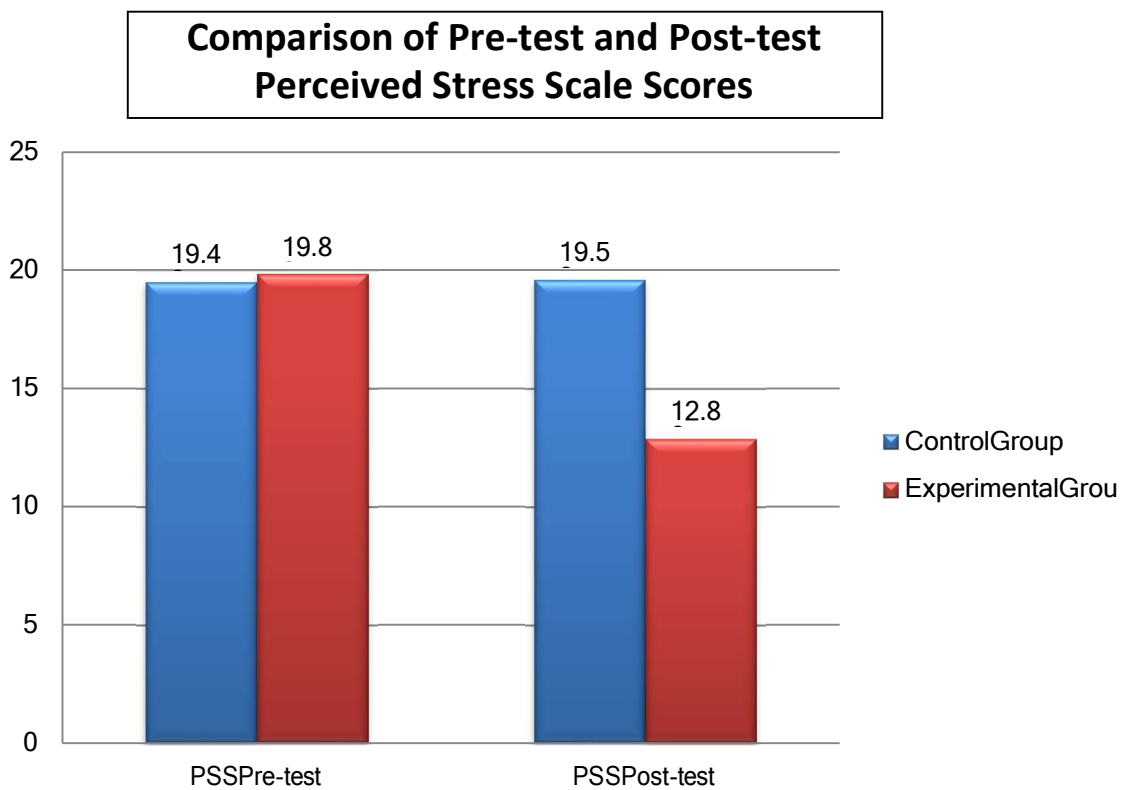


Figure 1: Comparison of Pre-test and Post-test Scores of Perceived Stress Scale.

Figure 1 shows the comparison of Pre-test and Post-test PSS scores between control group and experimental group. Statistical analysis was done using independent t-test which showed that there was no statistically significant difference in mean Pre-test PSS scores between the two study groups ($P=0.640$). This implies that the mean PSS scores were similar in both the groups before the intervention. While comparing the Pre and Post-test stress score between the experimental and control groups, the Pre-test mean score in the experimental group is 19.82 ± 3.65 and the Pre-test mean score in the control group was 19.48 ± 3.59 .

The Post-test mean score in the experimental group is 12.86 ± 3.53 and the Post-test mean score in the control group was 19.58 ± 3.49 . However, there was a statistically significant difference in mean Post-test PSS scores between the two study groups ($P < 0.05$). It was observed that the mean Post-test PSS score in the control group was significantly higher than the mean Post-test PSS score in experimental group. This implies that the mean PSS score decreased significantly in the experimental group as a result of EFT. This clearly shows that the administration of Emotional Freedom Technique on stress had significant reduction in Post-test level of stress among B.Sc. Nursing students in experimental group. So, it indicates the Emotional Freedom Technique was effective in reducing the stress level of B.Sc. Nursing students.

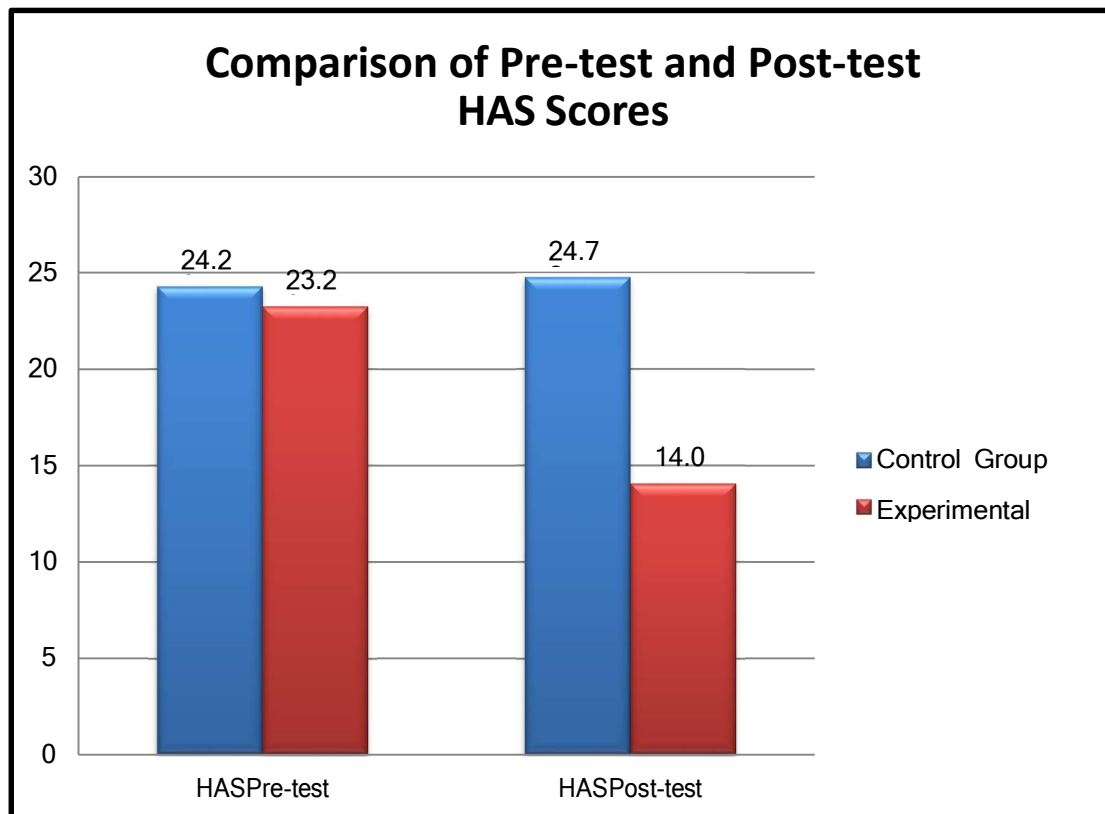


Figure 2: Comparison of Pre-test and Post-test Hamilton Anxiety Scale Scores

Figure 2 shows the comparison of Pre-test and Post-test HAS scores between control group and experimental group, there was a statistically significant difference in mean Post-test HAS scores between the two study groups ($P < 0.001$). Statistical analysis was done using independent t-test which showed that there was no statistically significant difference in mean Pre-test HAS scores between the two study groups ($P = 0.306$). This implies that the mean HAS scores were similar in both the groups before the intervention. The Pre-test mean score in the experimental group was 23.22 ± 3.12 and the Pre-test mean score in the control group was 24.26 ± 6.42 and the Post-test mean score in the experimental group was 14.04 and the Post-test mean score in the control group was 24.72 ± 6.54 .

It was observed that the mean Post test HAS score in the control group was significantly higher than the mean Post test HAS score in experimental group. This implies that the mean HAS score decreased significantly in the experimental group as a result of EFT. This clearly shows that the administration of Emotional Freedom Technique resulted in significant reduction in Post-test level of anxiety among B.Sc. Nursing students in experimental group. So, it indicates that the Emotional Freedom Technique was effective in reducing the anxiety level of B.Sc. Nursing students.

Part IV: Description of association of stress and anxiety levels with the selected demographic variable among B. Sc. Nursing students in Control and Experimental groups

It was observed that the mean Perceived Stress Scale score was significantly higher in participants whose fathers worked as senior officers and managers as compared to those whose fathers had elementary occupations. It was also seen that the mean Perceived Stress Scale score was significantly higher in participants whose mothers worked as professionals as compared to those whose mothers worked as skilled worker and elementary occupations. However, it has been observed that demographic variables (Gender, Current residence, Parental education, Family Monthly income, Type of institution, Number of Siblings, Type of Family) had no statistical significance with stress and anxiety levels.

Discussion:-

In the Present study there was no significant difference between the Pre- test and Post-test (stress score and anxiety score) among B.Sc. Nursing students in experimental and control group. Similar findings had been seen in Berna Dincer (2020) found that there was no significant difference between stress and anxiety among nursing staff in control and experimental group without Emotional Freedom Technique. In the Present study, a decrease level of stress and anxiety had been significantly seen as a result of Emotional Freedom Technique. Similar findings have been reported by Susan L. Patterson (2013) in which a significant reduction in stress and anxiety were achieved in B.Sc. Nursing students using EFT. In the present study it was clearly shown that the administration of Emotional Freedom Technique on stress had significant reduction in Post-test level of stress and anxiety among B.Sc. Nursing students in experimental group.

So, it indicated that the Emotional Freedom Technique was effective in reducing the stress level of B.Sc. Nursing students. Similar findings had been seen in Susan Librizzi Patterson (2016) which indicated a reduction in stress and anxiety levels among nursing students after administration of Emotional Freedom Technique in experimental groups. In the Present study, there was no association found between Pretest levels of stress and anxiety with their selected demographic variables in control group. The same study had been conducted by Prasad, Viji C, Suresh, Amrutha, Thomas, Dina K. (2013) shows that there was no significant association between stress level score and their selected demographic variables.

In the Present study it was observed that the mean PSS score was significantly higher in participants whose fathers worked as senior officers and managers as compared to those whose fathers had elementary occupation. It was also seen that the mean PSS score was significantly higher in participants whose mothers worked as professionals as compared to those whose mothers worked as skilled worker and elementary occupation. A similar study by Dr. Indira. A, Shabana. S, Rajeswari. H, B. Kalavathi (2019) had shown the association between the level of stress and anxiety with their demographic variables (Father and Mother Occupation)

Delimitations:-

- The study was limited to the B.Sc. Nursing students.
- Sample size was limited to 100 samples.

Conclusion:-

According to the investigation's findings, the researcher concluded that B.Sc. Nursing students' use of the Emotional Freedom Technique reduced their levels of stress and anxiety. For B.Sc. Nursing students, the investigator believed the Emotional Freedom Technique was essential to reducing stress and anxiety and improving quality of life.

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CONFLICT OF INTEREST: Author declares no any conflict of interest.

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