



## A STUDY TO EVALUATE THE EFFECTIVENESS OF HORTICULTURE THERAPY AT STRESS LEVEL FOR CHILDREN FOCUSED ON A SELECTED CENTER IN JABALPUR CITY (M.P.)

**Supriya Peter**

M.Sc Nursing, Mental Health Nursing, Super Specialty Hospital, N.S.C.B. Medical College, Jabalpur M.P..

**Stella Peter\***

M.Sc Nursing, Obs. & Gynae, Vice Principal, Govt. College of Nursing, N.S.C.B. Medical College Jabalpur. M.P.. \*Corresponding Author

**ABSTRACT** Organization is the placement of children in institutions, such as orphanages. Children of the institution are considered to be the most vulnerable in the community. These children are left helpless, abandoned, neglected for social, economic reasons. The objectives of this study were to assess the level of stress among children centered in the experimental and control group and to assess the effect of horticulture treatment on the level of stress among the children of the center in the assessment and control center, compare the level of stress between the experimental and control group after providing horticulture treatment and association between the level of stress among institutionalized children and modified demographic variation in the experimental and control group.

**KEYWORDS :** Children of the Institution, Medical Association, Horticulture treatment, Stress, Organization

### INTRODUCTION

Today's children are the future; this dynamic statement finds special significance in context as children (ages 0 to 14) make up one-third of the world's total population. Organizational institutions place children at greater risk for certain diseases. Institutional care can affect a child's ability to make smooth transitions from one stage of growth to another during his or her life. Children raised in institutions may suffer from severe abuse and emotional problems, such as miss behavior or abuse of people, have little knowledge and understanding of the world, and become adults with mental disorders. Every child, in providing a positive environment and a positive environment, can bloom into a fragrant flower all the time, to shine in all walks of life. This reminds us of the responsibility we have to shape and shape their current circumstances in the best possible way.

### NEED FOR STUDY

Most people probably think that childhood is a time when children are neglected, without problems or responsibilities; however, studies show that many children are more prone to depression and have symptoms similar to those of adults. As adults, children are often more prone to negative emotions and have difficulty coping with stress. Unlike adults, however, children do not have the means or skills to understand or control their stress in appropriate ways. Children need to rely on others to help them. Parents and caregivers need to be alert when children feel stressed and help them to feel better.

Depressed children can lead to physical symptoms such as stomach problems, headaches, sadness and pain. Many of the psychosomatic disorders and suicides that are commonly seen in children have been found to be the result of stress. Prolonged stress can lead to depression if not treated properly. Therefore, stress in children should be addressed early to avoid problems in later life.

Therapeutic Horticulture is the purposeful use of plants and plant-related activities to promote the health and well-being of an individual or group. The garden benefits people on many levels. One of the seemingly magical effects of gardening is stress relief. The emotional benefits of gardening can be derived in part from the natural survival goal of plant and garden food. As the K-State horticulture therapy website notes say, "Getting dirty is a part of growing up." Digging, hitting and chopping motions can relieve stress and conflict.

Significant pressure on orphaned children has been demonstrated in various studies by researchers. All studies show great urgency because the stress on institutionalized children can lead to significant deviations in the development process. The results of the studies are terribly disappointing and raise a deeper understanding of additional subjects. The researcher is therefore interested in providing Horticulture Therapy options for children by reducing their level of stress.

### MATERIALS AND METHODS

Quasi Experimental pre-test post-test control group design of Quasi was conducted. This study was conducted at Rajkumari Bai

Balnicketan, a site for a children's Institution in the Jabalpur region. Purposive sampling technique was used for this study. All subjects were divided into two groups: the control group and the experimental group. Each group contains 30 samples. Horticulture therapy was given to the children of the institution (experimental group). The data collection tool includes a list of self-structured questions.

### RESULT

The findings show that the mean pre-test score on the experimental group was 32.033 with an SD of 9.6 and that of the post -test of the experimental group was 24.166 with an SD of 6.797. The mean difference score was 7.867 and the average tired value was 2.61 greater than the above table value (2.00). Findings shows that the mean pre-test score in the control group was 31.66 with an SD of 9.548 and the post-test score in the control group was 31.2 with SD of 9.234. The Differential rate was 0.46 and the average paired t-value was 1.86 which is less than the table value (2.00). The calculated unpaired t-value was 3.45 greater than the table value (1.699). This indicates that there is a significant decrease in the level of stress in child-centered children after providing horticulture treatment.

### CONCLUSION

After a detailed analysis, the study elaborated on the conclusion. The mean pretest score in the experimental group was 32.033 with SD of 9.6 and that of the post test in experimental group was 24.166 with SD of 6.797. The Mean Difference score was 7.867 and the calculated t-value of pairing was 2.61 higher than the table value (2.00). The mean variance was 0.46 and the calculated paired t- value was 1.86 which is less than the table value (2.00)). The amount of unpaired t- value calculated was 3.45 which is larger than the table value (1.699). Therefore, on the basis of the above findings, it can be concluded without a doubt that there is a significant reduction in the level of stress in institutionalized children after providing horticulture therapy.

### STATEMENT PROBLEM

**A STUDY TO EVALUATE THE EFFECTIVENESS OF HORTICULTURE THERAPY AT STRESS LEVEL FOR CHILDREN FOCUSED ON A SELECTED CENTER IN JABALPUR CITY (M.P.)**

### OBJECTIVES

- Evaluation of the level of stress among institutionalized children in experimental and control group.
- Evaluation of the effect of horticulture therapy on the level of stress among institutionalized children in experimental and control group.
- Compare the level of stress between experimental and control group after providing horticulture therapy.
- Association between the level of stress among institutionalized children and selected demographic variables in experimental and control group.

### HYPOTHESIS

**H1:** There will be significant reduction in the level of stress among institutionalized children after providing horticulture therapy.

**H2:** There will be significant association between the level of stress among institutionalized children and selected demographic variables in experimental and control group.

**MATERIAL AND METHOD**

**RESEARCH APPROACH**

Quantitative & evaluative research approach

**RESEARCH DESIGN:**

Quasi Experimental pre- test post- test control group design.

**SAMPLE SIZE: 60**

**SAMPLING TECHNIQUE**

Purposive Sampling Technique

**Inclusion Criteria**

- Male and Female children with age group of 10-15 years who are having mild to severe level of stress as assessed by perceived stress scale.
- Children who are willing to participate in the study.
- Children who are not exposed to the same therapy previously
- Children who are present at the time of data collection.

**Exclusion Criteria**

- Children who have any mental disorders.

**DEVELOPMENT AND DESCRIPTION OF THE TOOL**

The tools used in this study are:

**Section A:** Demographic profile,

It consists of demographic data of the institutionalized children.

**Section B:** Stress assessment checklist

Self-structured check-list was used for this study. It consists of 30 items.

**VALIDATION AND RELIABILITY OF THE TOOL**

To obtain content validation, the tool was distributed to 5 specialists from the Department of Mental Health Nursing, one Psychiatrist and a Biostatistician and a checklist for validation criteria. Modifications were made to the tool based on the corrections provided. The reinforcement of the self-structured stress questions was established using the re-examination method by Karl Pearson correlation coefficient. The reliability rating obtained was  $r = 0.85$  indicating an acceptable level of reliability. The tool was therefore reliable in the study.

**RESULT AND DISCUSSIN**

**Section I**

Deals with the analysis of the demographic data of the sample.

**Control Group**

Finding of the variables shows that out of 30 samples the majority of samples belonged to age group of 14- 15 years 17 (57%). In gender, Majority of the samples were girls 16 (53.33%). In terms of education majority of samples were studying in 9<sup>th</sup> - 10<sup>th</sup> standard 12 (40%). Regarding Hobbies the majority of samples were interested in gardening 13 (43.33%). In reason for residing in institution majority of the samples were Orphan 26 (87%). Regarding duration of stay in institution majority of the samples were staying since more than 6 years 21 (70%). In Presence of parent's majority of the samples were having None of them 26 (87%). In Number of sibling's majority of the samples were having None 21 (70%). Regarding Parent or sibling visit majority of the samples had No visit 27 (90%). In Inter personal relationship maintained with inmates and care givers majority of the samples had maintained Inter personal relationship with inmates and care givers 18 (60%).

**Experimental Group**

Finding shows that majority of samples belonged to age group of 14- 15 years 15 (50%). In gender, Majority of the samples were girls 23 (76.66%). In terms of education majority of samples were studying in 9<sup>th</sup> - 10<sup>th</sup> standard 12 (40%). Regarding Hobbies the majority of samples were interested in gardening 12 (40%). In reason for residing in institution majority of the samples were Orphan 29 (97%).

Regarding duration of stay in institution majority of the samples were staying since more than 6 years 24 (80%). In Presence of parents' majority of the samples were having None of them 25 (83.33%). In Number of sibling's majority of the samples were having None 28(93%). Regarding Parent or sibling visit majority of the samples had No visit 28 (93%). In Inter personal relationship maintained with inmates and care givers majority of the samples had maintained Inter personal relationship with inmates and care givers 15 (50%).

**Section II**

Deals with the analysis of the level of stress among institutionalized children of control group and experimental group.

**Control Group**

Finding shows that pretest majority 16 (53.33%) were having mild level of stress, 11(36.66%) were having moderate stress, minority 3(10%) were having severe stress, none were having no stress.

**Experimental Group**

Finding shows that pretest majority 16(53.33%) were having moderate stress, 12(40%) were having mild stress, minority 2(7%) were having severe stress, none were having no stress.

**Section III**

Deals with the Effect of horticulture therapy on level of stress among institutionalized children experimental group.

**Control Group**

Finding shows that post-test majority 16(53.33%) were having mild stress, 9(30%) were having moderate stress, minority 5(17%) were having severe stress, none were having no stress.

**Experimental Group**

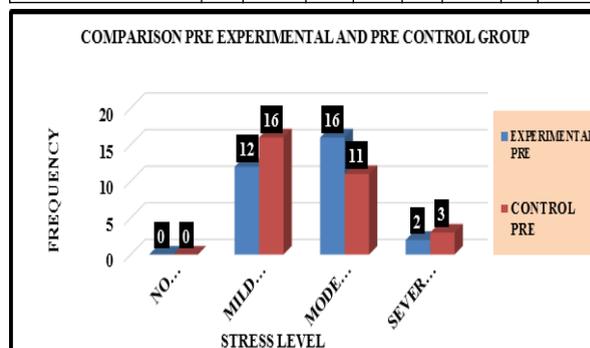
Finding shows that post-test majority 27(90%) were having mild stress, minority 3(10%) were having moderate stress, none were having severe stress, none were having no stress.

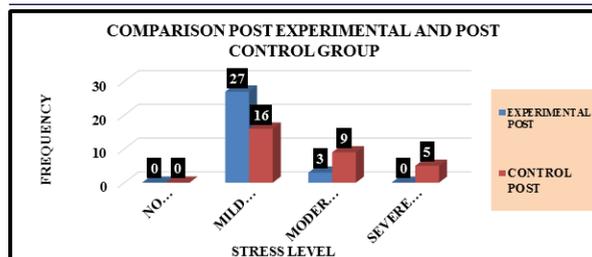
**Section IV**

Deals with the analysis of data related to the comparison of the level of stress between experimental and control group after providing horticulture therapy.

**Comparison Of Samples According To Perceived Level Of Stress Among Experimental And Control Group.**

LEVEL OF STRESS	PRE- TEST		POST -TEST					
	EXPERIMENTAL GROUP	CONTROL GROUP I- Assessment group	EXPERIMENTAL GROUP	CONTROL GROUP II- Assessment group				
	N=30	N=30	N=30	N=30				
Grading	freq uen cy	Perce n-tage	freq uenc y	perc enta ge	freq uen cy	Perce n-tage	fre que ncy	Perce n-tage
NO STRESS	0	0%	0	0%	0	0%	0	0%
MILD STRESS	12	40.00%	16	53.33%	27	90%	16	53.33%
MODERATE STRESS	16	53.33%	11	36.66%	3	10%	9	30%
SEVERE STRESS	2	7%	3	10%	0	0%	5	17%





During pre-test 16(53.33%) in the experimental group and 11(36.66%) in the control group had moderate stress, 12(40%) in the experimental group and 16(53.33%) in the control group had mild stress, 2(7%) in the experimental group and 3(10%) in the control group had severe stress, none of them had no stress. During post-test 27(90%) in the experimental group 16(53.33%) in the control group had mild stress, 3(10%) in the experimental group 9(30%) in the control group had moderate stress, none in the experimental group 5(17%) in the control group had severe stress, none of them had no stress.

Findings shows that the mean pretest score in the experimental group was 32.033 with SD of 9.6 and that of the post-test in experimental group was 24.166 with SD of 6.797. The Mean Difference score was 7.867 and the calculated paired t- value was 2.61 which is greater than the table value (2.00).

Findings shows that the mean pretest score in the control group was 31.066 with SD of 9.448 and that of the posttest in control group was 31.2 with SD of 9.534. The Mean Difference score was 0.46 and the calculated paired t- value was 1.86 which is less than the table value (2.00).

The calculated unpaired t- value was 3.45 which is greater than the table value (1.699).

#### Section V

Deals with the association between control and experimental pre-test level of stress among institutionalized children with selected demographic variables.

#### CONCLUSION

The primary objective of the study was to evaluate the effect of horticulture therapy on stress levels among institutional children. The objectives of this study were to evaluate the level of stress among institutional children of experimental and control group, to assess and evaluate the therapeutic effect of horticulture among institutionalized children in experimental and control group. The comparison between the level of stress among the children of experimental and control group and the relationship and association between the level of stress among institutionalized children and selected demographic variables in experimental and control group. The study attempted to test the hypothesis-There is a significant decrease in the level of stress in children tested by institutions after the provision of horticulture therapy, there is a association between the level of stress among institutional children and the selected demographic variables in the experimental and control group.

#### REFERENCES

1. Adverse Impacts on Children Living in Orphanage Institutions [Internet]. [Cited 2014 Jul 18]. Available from: <http://www.adoptvietnam.org/adoption/health-institutional-impacts.htm>
2. Care i. Violence against children in care and justice institutions. [cited 2014 jun 6]; available from: <http://www2.unicef.org/tdad/unvacstudychap5.pdf>
3. Data Management for Effective Implementation of the Juvenile Justice Act [Internet]. [cited 2011]. Available from: [http://www.unicef.org/india/8\\_Data\\_Management\\_for\\_Juvenile\\_Justice\\_Act.pdf](http://www.unicef.org/india/8_Data_Management_for_Juvenile_Justice_Act.pdf)
4. Heart's Cry Children's Ministry [Internet]. [cited 2014 Jun 6]. Available from: <http://www.heartsrychildren.com/assets/Uploads/AttachedFiles/Effects-of-Inst./Institutionalization-English.pdf>
5. Welcome - Organization for the Protection of Children's Rights - Resources - Statistics [Internet]. [Cited 2014 Jul 18]. Available from: [http://www.opcr.org/english/stats\\_world.htm](http://www.opcr.org/english/stats_world.htm)
6. Nipccd [Internet]. [Cited 2014 Jun 6]. Available from: <http://nipccd.nic.in/reports/dsmdata.pdf>
7. Nayak PN. Need for De-institutionalization of Children.[Internet]. [Cited 2014 Jul 18]. Available from: <http://diaslaw.in/need-for-de-institutionalization-of-children/>
8. Child labour: concept and causes [cited 2014 Jul 18]. Available from: <http://nptel.ac.in/courses/109103022/module3/lec18/1.html>
9. Chapter1 introduction. [Internet]. [cited 2014 ].Available from: [http://shodhganga.inflibnet.ac.in/bitstream/10603/15786/9/09\\_chapter%201.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/15786/9/09_chapter%201.pdf)