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Impact of Life Skills Training Programme on Quality of Life among Children Residing at Selected Residential Centers

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Abstract

Family plays a pivotal role in providing favorable social environment to enhance the quality of life (QoL) among children. Children living in residential care centers are emotionally disturbed; they frequently have been physically abused, are prone to violent behavior and face lots of psychosocial challenges, which affect their normal growth and development. Subsequently, the services delivered at most of the residential centers are inappropriate. They do not satisfy the minimum requirements of the children and cause various problems, including anxiety, poor personal and social adjustment, and low self-esteem. But being in residential centers and separation from their families makes the children more vulnerable to psychosocial issues. Studies have shown that children who live in residential facilities have a lower quality of life than children who live with their families. Successful implementation of life skills education program have shown significant improvement in psychosocial well-being like a significant improvement on happiness, quality of life, and emotion regulation among children. Hence, it was felt that there was a need for enhancement of quality of life among children residing in selected residential care facilities, through life skills approach.

Material & Methods:

A quantitative approach and Pretest-posttest research design was adopted for this study. The study was carried out in Tamil Nadu at five chosen Residential Centers. Children residing in residential centers and aged from twelve to eighteen years old were selected. Sample consists of children living in five specific residential centers in Tamil Nadu, the total sample drawn were 120. Simple random selection technique was employed to choose the 120 children from the designated residential centers. In this study, simple random sampling technique was used to assign the children in interventional group (60) and control group (60). To assess the quality of life, data were gathered using a Demographic data sheet developed by the researcher and the WHO Quality of Life-BREF scale was used. The intervention package for the current study was developed based on these two modules (Sekar et al., 2008 and Vranda M.N, 2015). Pretest was conducted using the selected tools for both the groups. The Interventional group thereafter received life skill training programme (LSTP), 4 hours sessions daily for 5 days. Subsequently, post-intervention data was gathered using the same tools at end of the first week, first month, third, and sixth month after the Life Skill Training Programme.

Results:

In the Interventional group, the pretest total score of quality of life was found to be 92.1±12.7 and 86.77±12.7 in the control group. The posttest Mean±SD of quality of life in the Interventional group was 98.9±12.6 and in control group 84.1±11.6, respectively. Between the group (F-73.9; $p<0.001$) and with-in group (F-5.8; $p<0.001$) revealed that there was a significant increase in the total scores of the QoL among the children in Interventional group. The findings revealed that there was a significant difference between the five levels of assessments on overall quality of life (F=5.8, $p<0.001$), Physical health (F=2.9, $p<0.05$), and Environment (F=5.0, $p<0.001$) of the children in Interventional group than in control group. The children in the Interventional group possess higher quality life and better physical health and adapt well to their environment.

Conclusion:

The quality of life of the children in interventional group was significantly improved from the baseline to four follow up assessments. It was concluded that implementation of life skills training programme and if the children practice it regularly in due course of time the children can attain sense of well-being.

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Introduction

Over 440 million people, or 40% of India's overall population, are under the age of 18, making up more than one-third of the nation's population. Nineteen percent of the world's children live in India1. There are presently 14 million orphans worldwide, making up 2% of the total population2In 2010, the estimated total number of socially handicapped children in India was 2,32,46,000, or 6.8% of the country's total children population, out of all the orphans children globally3.

Throughout the world, there are 153 million children, ranging in age from infants to adolescence4. Up to 8 million children are thought to be living in residential care facilities worldwide, according to UN estimates. The majority of children in residential care facilities have one or both parent's alive and other family members who can take care of them, and they are not orphans. The low quality of care in many facilities puts them at greater risk of abuse and neglect5. Children staying in such residential care centers are mentally and emotionally disturbed; they are prone to violent conduct, have experienced physical abuse on a regular basis, and may have even committed crimes. They frequently perform incredibly poorly in school, yell or fight to resolve social disputes, and are much more prone to partake in dangerous activities like drug usage or unprotected sex. Moreover, individuals encounter difficulties in effectively adjusting to community6.

Children and adolescents are among those most impacted by inevitable changes in lifestyle. In any community, the fast evolving communal, ethical, moral, and spiritual expectations and demands usher particular lifestyles, particularly among adolescent youth. In addition, these modifications negatively impact their social, psychological, and physical health, leading to engagement in high-risk activities, including drug misuse, teenage pregnancy, AIDS, delinquency, school abandonment, suicide, early sexual experimentation, abuse and neglect, and murder. The likelihood of today's young adolescents successfully achieving adulthood is lower than those of their counterparts who lived in any earlier century, and they need a specific set of abilities for effective transition7. According to a descriptive study, adolescent girls from varied backgrounds did not significantly differ in their subjective well-being across its various dimensions9.

Powell (1995) defines life skills as the life coping skills consistent with the developmental tasks of the fundamental human development processes, specifically those skills required to perform tasks for a given age and gender in the psychological, physical, sexual, vocational, cognitive, moral, ego, and emotional adulthood than their counterparts lived during any part of the previous century, and they require a set of skills for successful adaptation. Successful life skills education programme implementation has led to a considerable improvement in psychosocial well-being, including happiness, quality of life, and controlling emotion among orphanage children10. There is sufficient evidence that suggests life skills education is vital for effective adaptation among children residing in Residential Centers. A research study on the impact of life skills education on Tarbiat Moallem pupils' revealed a significant difference in the level of happiness and emotion regulation and quality of life in relation to social relationships and mental health, and physical situation there was no significant differences in the physical health11.

Mohammad S, Hojjatollah F and Fariba F. (2012) reported that there was a significant difference in general health, physical symptoms, and social function before and after life skills education, it promotes individuals' ability to solve the problem and to make to utilize the best of social supports12. Studies related to the issues related to children residing in residential centers address that over the past ten years, there has been few research studies conducted on life skills instruction and quality of life (QoL). An orphan who has a high quality of life is able to handle challenges, stress, and other psychosocial problems effectively. In light of the orphans' quality of life, it is crucial to address obstacles in life, their worries, and make the most of their abilities, energies, and potential in order to increase effectiveness, fulfillment, happiness, life orientation, hope, and optimism. Though the present study does not address all aspects that have come forth in the review, it attempts to explore variables like quality of life of children residing in residential care facilities and life skill education. The purpose of this study was to evaluate how a life skills training programme affected the quality of life for children residing in selected residential care facilities. Tamil Nadu. India.

Methodology:

The purpose of this study was to evaluate the quality of life of children residing in Residential Centers, and to administer Life Skills Training programme (LSTP) to develop the quality of life for children in selected Residential Centers, Tamil Nadu, India. Hence a quantitative approach was found to be suitable to fulfill the study's objectives. Pretest-posttest research design is a valid Interventional strategy used for this investigation.

The study was carried out in Tamil Nadu at five chosen Residential Centers. Alamelupuram, Karunkulam, Tirunelvelli District: Sri Kanyakumari Gurukulam Children's Home. Sambavarvadakarai, Tenkasi, Loving Hands Trust India, Zion Bethel Home, Tirunelvelli District. Rehoboth Happy Home, Kanyakumari District, Nagercoil. Indian Revival Ministries Children's Home, Pangalasurandai, Tirunelvelli District; Annai Therasa Children's Home, Vickramasingapuram, Tirunelvelli District.

The accessible population for the present study comprised of children residing in Residential Centers. Sample consists of children living in five specific residential centers in Tamil Nadu, the total sample drawn were 120 children aged 12-18 years. Five Residential Centers were selected based on the permission granted by the residential center authorities for data collection. Simple random selection technique was employed to choose the 120 children from the designated residential centers. From this sample, 60 children (36 male and 24 female) were assigned to the interventional group and 60 children (35 male and 25 female) were assigned to control group. In this study, simple random sampling technique was used to assign the children in interventional group and control group. The children were selected randomly from the list by lottery method.

To assess the quality of life, data were gathered using a Demographic data sheet developed by the researcher and the WHO Quality of Life-BREF scale was used to measure the QoL. The Cronbach's alpha coefficients, which show strong internal consistency among the items within the domain, varied from 0.73 to 0.81 on this standardized tool. The intervention package for the current study has been developed based on the two modules on life skills education (Sekar et al., 2008 and Vranda M.N, 2015), the validity of which has been established with a large population of other categories of children. These modules were modified based on the needs and issues of children in residential center in line with the purpose of the research. The content of the LSTP is shown below.

Table1: Content of the Life Skills Training Package

Module No.	Topics	Methodology
	Introduction and overview of Life skills education	Lecture and discussion
	Issues, challenges, and needs of children in the Residential Centers	Group discussion
	Decision Making-The choice is yours	Situation analysis and Group activity
	Problem solving- I can Deal	Group activity (Knot game)
	Critical thinking	Group activity
	Creative thinking	Individual activity
	Interpersonal relationship- Blind Walk	Game and group discussion
	Effective communication	Group activity (pass the message)
	Empathy- Stepping into Someone's Else's Shoes	Game and group discussion
10.	Self-awareness	Individual activity (I am ….)
..	Coping with stress	Group activity (Number game)
?.	Coping with emotions	Individual activity (Sharing); Group exercise, Role Play and discussion
3.	Healthy living- Mental health (Caring for the Mind and Body)	Group activity and group discussion
4.	Time Management/ Daily routine	Individual activity
5.	Self-esteem- I am Special	Individual work and Brainstorming

Ethical considerations were followed such as obtained permission from Manager or authority of selected residential centers, and informed assent was obtained from the children prior to the study. Assured confidentiality and anonymity of the data collected from the children. The study was carried out during the free hours and weekends, so it did not interfere in the academic activities of the students. Instructed the participants that they are free to drop out from the study if they wished to do so, which would in no way interfere with school activities. After receiving administrative approval data was collected. The children of both groups were then asked to give their informed consent to participate in the research study. The children were assigned

interventional group and control groups randomly. Finally, a Pretest using the selected tools was performed on both groups. The sociodemographic data sheet and Quality of Life were used to gather the data. The Interventional group thereafter received life skill training programme (LSTP), 4 hours sessions daily for 5 days. Subsequently, post-intervention data was gathered using the same tools at end of the first week, first month, third, and sixth month after the Life Skill Training Programme.

The Statistical Package for Social Science (SPSS) version 17.0 was used to perform the statistical analysis of the data. Frequencies and percentages were used to analyze socio demographic data, Mean and standard deviation (SD) of scores of quality-of-life were used to find out the efficacy of Life skill training package. Repeated measure ANOVA test was used to assess the effectiveness of life skill training programme between the interventional group and control group. The pretest quality of life scores were compared to demographic characteristics using an ANOVA and Chi Square test.

Results and Interpretation:

Section 1: Description of characteristics of children residing in residential centers.

Table 2: Number and Percentage distribution of children residing in Residential Centers based on demographic characteristics
(N= 120)

Sl. No.	Demographic characteristics	Category	Interventional group (n=60)		Control group (n=60)		χ^2	p-value
			n	%	n	%		
1.	Age (Mean)	Male	14				t= -1.0	0.30
		Female	14.3					
	Age (years)	12-14	41	68	32	53		
		15-16	16	27	19	32		
		17-18	3	5	9	15		
2.	Gender	Male	36	60	35	58	0.34	0.85
		Female	24	40	25	42		
3.	Religion	Hindu	58	97	36	60	1.86	0.42
		Christian	2	3	24	40		
4.	Family Type	Nuclear	33	55	25	42	6.31	0.10
		Joint	18	30	26	43		
		Single Parent	4	7	8	13		
		Extended	5	8	1	2		
5.	Monthly Family Income	Nil-	5	8	11	18	8.49	0.08
		Below Rs.1500	11	18	11	18		
		Rs.1500- 3000	25	42	12	20		
		Rs.3001- 5000	11	18	12	20		
		Above Rs.5000	8	13	14	23		
6.	Reason for placement	Mother died	14	23	11	18	5.27	0.26
		Father died	15	25	11	18		
		Both parents died	4	7	11	18		
		Poverty	23	38	20	33		
		Parents separated	4	7	7	13		
7.	Duration of stay	<1 year	4	7	9	15	7.87	0.05
		1-2 years	20	33	13	22		
		3-5 years	13	22	23	38		
		>5 years	23	38	15	25		
8.	Background	Urban	19	32	13	23	0.86	0.09
		Rural	41	68	46	77		
9.	Educational status of the child	Upper Primary	35	58	21	35	**7.01**	**0.03**
		High school	21	35	30	50		

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		Higher secondary	4	7	9	15	
		Irregular	19	32	20	33	

Table 2 depicts the demographic characteristics of the children residing in selected residential centers.

Regarding the age, the Interventional group comprised of 41 (68%) children between the ages of 12 -14, 16 (27%) aged 15 to 16 years, and 3 (5%) children between the 17 to 18 years of age, with the average Mean age of 14 years and in the control group 32 (53%) of the children were in the age between 12 to 14 years, 19 (32%) with age group 15 to 16 years and 9 (15%) of children with age range from 17 to 18 years respectively and the average Mean age of the children was 14 years.

With respect to the gender, in the Interventional group, the majority 36 (60%) were boys and 24 (40%) were girls. Similarly in the control group 25 (42%) of the participants were girls, and 35 (58%) were boys. About the religion, in Interventional group, most 58 (97%) of them belonged to Hindu religion and only 2 (3%) children were Christians. In control group, 36 (60%) children belong to Hindu religion and 24(40%) children belong to Christian category. From the above it is inferred that majority of the children in both groups belongs to Hindu community.

In relation to the response to the type of family, in the Interventional group, more than half of the sample belong to nuclear family, 18 (30%) children from joint family, 4 (7%) children have single parent and 5 (8%) children have extended family type. In the control group, 25 (42%) children were having nuclear family, 26 (43%) from joint family, 8 (13%) children have single parent, and 1 (2%) child is from extended family type. In Interventional group and control group, the majority of the children have nuclear family type.

Regarding the monthly family income, in the Interventional group, 5 (8%) children were found to have no family income, 11 (18%) children found to have monthly family income less than Rs.1500, 25 (42%) children have monthly family income within Rs.1500-3000, 11 (18%) family income within Rs. 3001-5000 and 8 (13%) monthly family income was above Rs.5000. In control group, 11(18%) were found to have no family income, 11 (18%) found to have monthly family income less than Rs.1500, 12 (20%) monthly family income within Rs.1500-3000, 12 (20%) family income within Rs. 3001-5000 and 14 (23%) family income above Rs.5000.

Pertaining to the cause of the placement at the orphanage. 14 (23%) of the children in the Interventional group have lost their mother, 15 (25%) have lost their father, 4 (7%) have lost both parents, 23 (38%) were admitted due to poverty, and 4 (7%) children's parents were separated and in the control group equally 11 (18%) children had either lost their father or mother, and 11 (18%) have lost both father and mother, 20 (33%) are in poverty, and 7 (13%) children were admitted to the orphanage due to their parental separation.

Regarding the duration of stays at orphanage, in the Interventional group, 4 (7%) children stayed for less than a year, 20 (33%) stayed between one to two years, 13 (22%) stayed between three and five years, and 23 (38%) stayed for more than five years. In the control group, 9 (15%) of the children stayed for less than a year, 13 (22%) stayed for between one and two years, 23 (38%) stayed between three and five years, and 15 (25%) stayed for more than five years. Regarding the background of the children, in the Interventional group 19 (33%) children were be from urban areas and the majority 40 (67%) children were from rural areas. In control group, 13 (23%) children were from urban and the majority 46 (77%) children were from rural areas.

Regarding the educational status, in the Interventional group, 35 (58%) were studying in upper elementary, 21 (35%) in high school, and 4 (7%) studying in higher secondary school. In the control group, 9 (15%) children were found to be in higher secondary class, 21 (35%) children were in upper primary, 30 (50%) children were in high school level.

Section B: Effectiveness of LSTP on Quality of life of children residing in Residential Centers.

Table 3: Pre and Posttest Mean total score of quality of life in Interventional group and control group. (N=120)

Assessment	Interventional group (n=60)		Control group (n=60)	
	Mean	SD	Mean	SD
Pretest	92.1	12.7	86.7	12.7
Posttest	98.9	12.6	84.1	11.6

Table 3 illustrates the Mean±SD of the Pre and Posttest total scores of quality of life in Interventional group and control group. In the Interventional group, the pretest total score of quality of life was found to be 92.1±12.7 and 86.77±12.7 in the control group. The posttest Mean±SD of quality of life in the Interventional group was 98.9±12.6 and in control group 84.1±11.6, respectively. Same has been depicted in fig. 1.

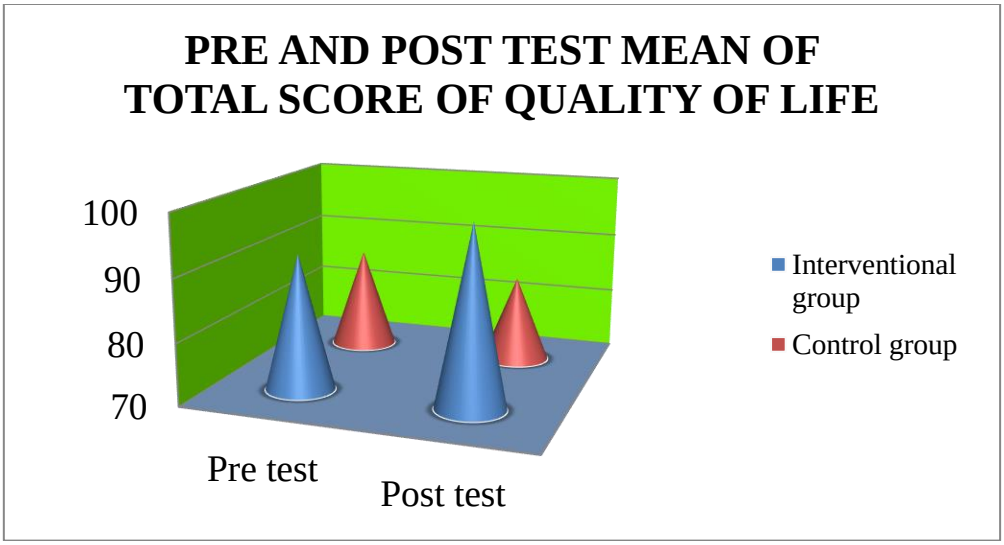

Fig. 1 Pre and Posttest Mean scores of quality of life in the Interventional group and control group.

Table 4: Comparison of Pretest and posttests (I, II, III, and IV) total scores of Quality of life in Interventional group and Control group (N=120)

Sl. No.	Group	InterventionalGroup		Control Group		Between group F (p-value)	With-in group F (p-value)
		Mean	SD	Mean	SD		
1	Pretest	92.1	12.7	86.7	12.7	73.9 (0.001)	5.8 (0.001)
2	Posttest 1	98.9	12.6	84.1	11.6		
3	Posttest 2	100.3	13.1	87.2	12.6		
4	Posttest 3	102.1	8.4	86.1	12.8		
5	Posttest 4	100.1	6.6	86.7	11.1		

Table 4 depicts the comparison of Mean±SD of Pretest and posttests (1, 2, 3, 4) total scores of Quality of Life in Interventional and control group of quality of life. In the Interventional group, the Mean±SD of Pretest total score of quality of life in the Interventional group was 92.1±12.7 and in the control group it was 86.7±12.7. In Posttest 1, in Interventional group was 98.9±12.6 and in the control group it was 84.1±11.6. In Posttest 2, in the Interventional group it was 100.3±13.1 and in the control group 87.2±12.6. Regarding Posttest 3, in the Interventional group it was 102.1±8.4 and in the control group 86.1±12.8. In Posttest 4, in the Interventional group it was 100.1±6.6 and in the control 86.7±11.1. Between the group (F-73.9; $p<0.001$) and with-in group (F-5.8; $p<0.001$) revealed that there was a significant increase in the total scores of the QoL among the children in Interventional group, who had attended LSTP.

Table 5: Domain wise comparison of Pre and Posttests (1, 2, 3, and 4) scores of Quality of Life in |Interventional group and Control group (N=120)

Sl. No	Domains	Time	Interventional group (n=60)		Control Group (n=60)	
			Mean	SD	Mean	SD
1.	Overall perception of quality of life	Pretest	3.7	0.9	3.3	0.9
		Posttest 1	4.0	0.8	3.2	1.1
		Posttest 2	3.8	1.1	3.1	1.1
		Posttest 3	3.8	0.8	2.9	1.1
		Posttest 4	3.4	0.7	2.9	1.2

2.	Overall perception of health.	Pretest	3.7	1.1	3.0	1.2
		Posttest 1	4.0	0.9	3.2	1.3
		Posttest 2	4.0	1.1	3.3	1.0
		Posttest 3	4.0	0.9	3.2	1.0
		Posttest 4	3.8	0.8	3.2	0.9
3.	Physical health	Pretest	23.3	3.9	22.4	4.0
		Posttest 1	24.6	3.1	21.3	4.1
		Posttest 2	24.8	3.2	22.3	4.6
		Posttest 3	25.0	2.7	22.0	4.6
		Posttest 4	24.5	2.1	22.6	4.4
4.	Psychological	Pretest	21.0	3.7	18.7	3.6
		Posttest 1	21.6	2.8	18.5	3.6
		Posttest 2	21.8	3.5	20.4	3.0
		Posttest 3	22.4	2.4	19.9	3.7
		Posttest 4	22.4	2.4	20.1	3.3
5.	Social relationship	Pretest	10.9	2.6	10.2	2.4
		Posttest 1	11.4	2.3	9.9	2.3
		Posttest 2	11.5	2.4	10.4	2.3
		Posttest 3	12.0	1.8	10.1	2.2
		Posttest 4	11.5	1.9	10.8	1.9
6.	Environment	Pretest	28.2	4.0	27.3	4.8
		Posttest 1	31.1	4.7	26.1	4.7
		Posttest 2	30.8	4.6	27.4	4.7
		Posttest 3	31.8	3.3	27.6	4.6
		Posttest 4	31.0	2.5	27.4	4.7

Table 5 highlights the comparison of domain wise Mean±SD of Pretest and posttests (1, 2, 3, 4) total scores of Quality of Life of children in Interventional group and Control group.

Regarding the overall perception of quality of life, in the Pretest was 3.7±0.9 in the Interventional group and 3.3±0.9 in the control group and there was an increase in Mean±SD of Posttests (1. 2, 3, and 4) scores in Interventional group than in control group. In relation to the overall perception of health, the Pretest was 3.7±1.1 in the interventional group and 3.3±1.2 in control group and there was an increase in Mean and SD of Posttest(I, II, III and IV) scores in Interventional group than in control group. In domain 1 (Physical health), the Pretest was 23.3±3.9 in Interventional group and 22.4±4.0 in control group and there was an increase in Mean and SD of Posttests (1. 2, 3, and 4) scores in Interventional group than in control group. In domain 2 (Psychological), the Pretest was 21.0±3.7 in Interventional group and in control group 18.7±3.6 and there was an increase in Mean and SD of Posttest(I, II, III and IV) scores in Interventional group, whereas in control group no changes noted. In domain 3 (Social relationship), the Pretest was 10.9±2.6 in interventional group and in control group 10.2±2.4 and there was an increase in Mean±SD of Posttests (1. 2, 3, and 4) scores in Interventional group than in control group. Regarding the domain 4 (Environment), in the Mean±SD of Pretest scores, in Interventional group was 28.2±4.0 and in control group 27.3±4.8 and there was an increase in Mean and SD of Posttests (1. 2, 3, and 4) scores in Interventional group than in control group.

Table 6: Between group comparison among pre, posttests (1, 2, 3, and 4) assessments of the children in Interventional group and control group on the scores of quality-of-life skills (N=120).

Domains	Group	Pretest (n=60)		Posttest 1 (n=60)		Posttest 2 (n=60)		Posttest 3 (n=60)		Posttest 4 (n=60)		F	P-Value
		Mean	SD	Mean	SD		SD		SD	Mean	SD		

Overall perception of quality of life	1	3.7	0.9	4.0	0.8	3.8	1.1	3.8	0.8	3.4	0.7	33.2	0.001
	2	3.3	0.9	3.2	1.0	3.1	1.1	2.9	1.1	2.9	1.2		
Overall perception of health.	1	3.7	1.1	3.9	1.0	4.0	1.1	4.0	0.9	3.8	0.8	38.7	0.001
	2	3.0	1.2	3.2	1.3	3.3	1.0	3.2	1.0	3.2	0.9		
Physical health	1	23.3	3.9	24.6	3.1	24.8	3.2	25.0	2.7	24.5	2.1	26.7	0.001
	2	22.4	3.9	21.3	4.1	22.3	4.6	22.0	4.6	22.6	4.4		
Psychological	1	21.0	3.7	21.6	2.8	21.8	3.5	22.4	2.4	22.4	2.4	40.3	0.001
	2	18.7	3.6	18.5	3.6	20.4	3.0	19.9	3.7	20.1	3.3		
Social relationship	1	10.9	2.6	11.4	2.3	11.5	2.4	12.0	1.8	11.5	1.9	26	0.001
	2	10.2	2.4	9.9	2.3	10.4	2.3	10.1	2.2	10.8	1.9		
Environment	1	28.2	4.0	31.0	4.7	30.8	4.6	31.8	3.3	31.0	2.5	45	0.001
	2	27.3	4.8	26.1	4.7	27.4	4.7	27.6	4.6	27.4	4.7		
Total Scores	1	92.1	12.7	98.9	12.6	100.3	13.1	102.1	8.4	100.1	6.6	73.9	0.001
	2	86.7	12.7	84.1	11.6	87.2	12.6	86.1	12.8	86.7	11.1		

Table 6 highlights between group comparison of pretest, post tests (1, 2, 3, 4) assessments of the children in Interventional and control group on the scores of Quality of Life. It was found that in all the domains, such as overall perception of quality of life ($F=33.3$, $p<0.001$), overall perception of health ($F=38.7$, $p<0.001$), physical health ($F=26.7$, $p=<0.001$), psychological ($F=40.3$, $p<0.001$), social relationship ($F=26$, $p<0.001$) and environment ($F=45$, $p<0.001$) and the total Scores ($F=73.9$, $p<0.001$) of quality-of-life scale, found to have a significant difference in the QoL of the children in Interventional than in the control group. This implies the following. Firstly, in the interventional group children gained better life skills than those in control group and

secondly there was retention of knowledge about life skills among the Interventional group children in comparison with control group. It also revealed that the children in interventional group developed higher quality of life in all posttests (1, 2, 3, 4) than those children in control group. This has been graphically represented in fig. 4.

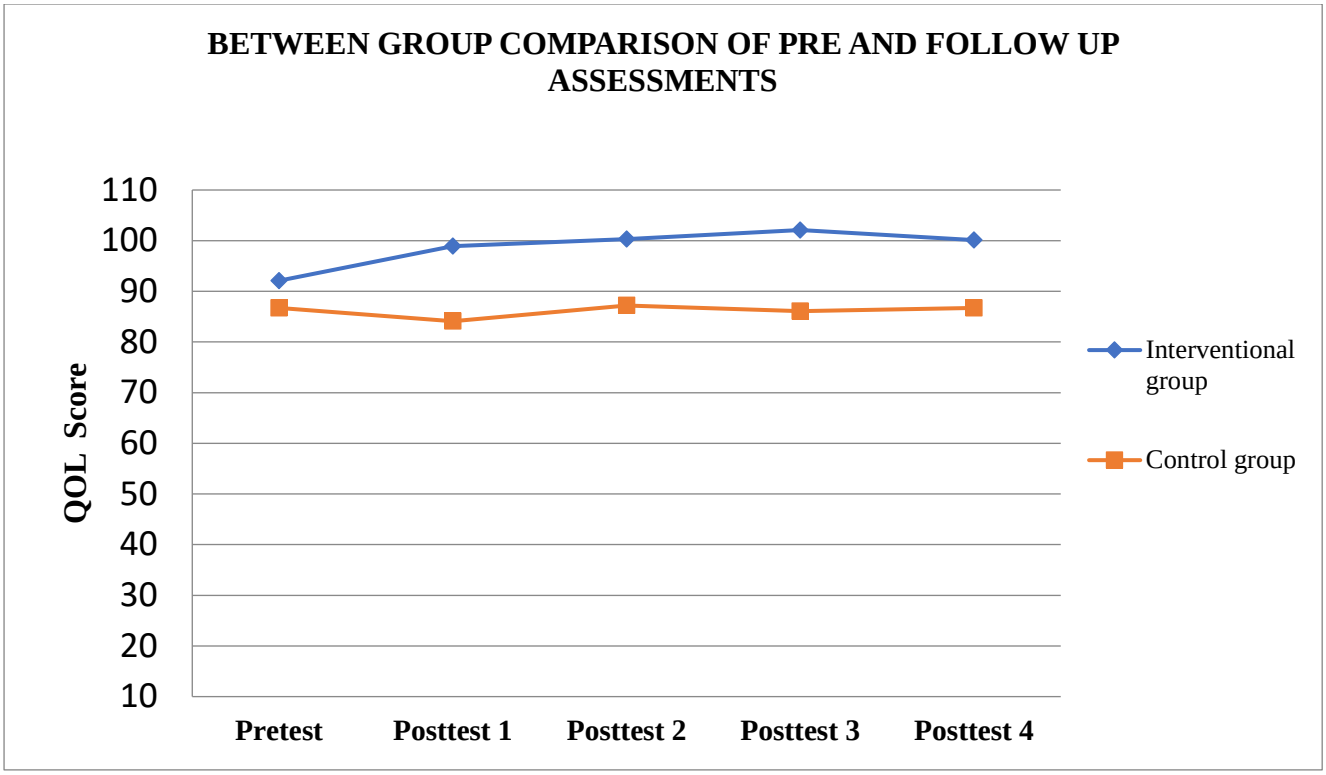

Fig. 2: Between group comparison of pre and posttests (1,2, 3, 4) of scores of quality of life in the children in Interventional group and control group.

Table 7: With-in group comparison of pretest and posttests (1, 2, 3, 4) scores of domains of QoL in Interventional group and Control group

Domains	Group	Pretest (n=60)	Posttest 1 (n=60)	Posttest 2 (n=60)	Posttest 3 (n=60)	Posttest 4 (n=60)	F	P-Value
Domains	Group	Pretest (n=60)	Posttest 1 (n=60)	Posttest 2 (n=60)	Posttest 3 (n=60)	Posttest 4 (n=60)	F	P-Value
		Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**
Overall perception of quality of life	Interventional Group	3.7	0.9	4.0	0.8	3.8	1.1	3.8
	Control Group	3.3	0.9	3.2	1.0	3.1	1.1	2.9
Overall perception of health.	Interventional Group	3.7	1.1	3.9	1.0	4.0	1.1	4.0
	Control Group	3.0	1.2	3.2	1.3	3.3	1.0	3.2
Physical health	Interventional Group	23.3	3.9	24.6	3.1	24.8	3.2	25.0
	Control Group	22.4	3.9	21.3	4.1	22.3	4.6	22.0

Psychological	Interventional Group	21.0	3.7	21.6	2.8	21.8	3.5	22.4
	Control Group	18.7	3.6	18.5	3.6	20.4	3.0	19.9
Social relationship	Interventional Group	10.9	2.6	11.4	2.3	11.5	2.4	12.0
	Control Group	10.2	2.4	9.9	2.3	10.4	2.3	10.1
Environment	Interventional Group	28.2	4.0	31.0	4.7	30.8	4.6	31.8
	Control Group	27.3	4.8	26.1	4.7	27.4	4.7	27.6
Total Scores	Interventional Group	92.1	12.7	98.9	12.6	100.3	13.1	102.1
	Control Group	86.7	12.7	84.1	11.6	87.2	12.6	86.1

Table 7 highlights the with-in group comparison among pre and posttests (1, 2, 3, 4) scores of domains of QoL of the children in Interventional group and control group. The findings revealed that there was a significant difference between the five levels of assessments on overall quality of life ($F=5.8$, $p<0.001$), Physical health ($F=2.9$, $p<0.05$), and Environment ($F=5.0$, $p<0.001$) of the children in Interventional group than in control group. The children in the Interventional group possess higher quality life and better physical health and adapt well to their environment.

Section C: Association between the Pretest scores of Quality of Life and demographic characteristics of children residing in Residential Centers.

The finding revealed that there was no significant association between the demographic characteristics like age, gender, religion, family type, monthly family income, reason for placement, duration of stay, background, and the educational status of the child with the QoL. This indicates that the demographic characteristic does not influence the QoL of children residing in the Residential Centers.

Discussion:

Section 1: Description of characteristics of children residing in Residential Centers.

With respect to the age of the children, both the groups, majority 68% and 53% of the children in were between 12-14 years of age and the Mean age was 14 years. Proper guidance at this period will promote physical and mental well-being among the children residing in Residential Centers. Many studies conducted in India and other countries explained that children were at high risk of leaving their family due to reasons such as lack of access to proper care at home and they were physically, mentally, and socially deprived, they also face lots physical and mental health issues. The study result was constant with the study conducted by Helal and Houaida. (2018), the children were between the age 6 to 17 years and Mean of 13.41, out of them 63.1% aged from 12 to 17 years13. In contrast, Manal Al.Q. (2021) reported that majority (70.4%) were between 14 to 17 years of age14, Kalagi SH, Sajjan SB, Natekar DS. (2020) stated that most of the children (30%) belonged to 14-15 years of age, 26.66% belonged to 10 to 11 and 12 to 13 years of age, and 16.66% belonged to the age group of 16 to 18years15. Khormehr M., et al (2020) identified that the participants were having the Mean age of 11.9716. Kudzai Emma CM. (2017) study participants age range from 6 – 23 years With respect to the gender of the children, in both the groups' more than half 60% in Interventional and 58% in control group were males. Related result was observed in a study conducted by Khormehr M., et al (2020) reported that majority 57 % were boys and 43% girls16 and Kudzai Emma CM (2017) reported 56% were male and 42% were female17. In contrast to the findings, Helal and Houaida. (2018), stated that majority (57.0%) of them were females13. In another study by Kalagi SH, Sajjan SB, Natekar DS. (2020) reported that the majority (60%) of the participants were female15. Durualp E and Cicekoglu P (2013) conducted a study among male children in Residential Centers; it was revealed that male children suffer from feeling of loneliness18. Ozge K, Çaman, Hilal O. (2011) reported that female gender were have several issues such as skipping work or school, being unhappy at school

or not spending time with family, having a chronic illness, and having a low quality of life score were linked to a higher risk of mental disorders.9.

In the groups, experiment group (97%) and control group (60%) majority of the children belonged to Hindu religion. In India majority of the people follows Hinduism traditionally and it is important to examine the religions and cultural practice. Considering this the LSTP was developed, and it can be administered to Indian children. Kalagi SH, Sajjan SB, Natekar DS. (2020) reported that more than half of the participants (56.66%) were Hindus, 23.33% were Muslims, and 20% were Christians15.

In this study, majority 55% of the children in the Interventional group belonged to nuclear type of family, and control group, 43% children were belonged to joint family. Elke JB. (2006) reported that children who experience violence and discrimination are most important in leaving their home20.

Regarding monthly family income, most of the children in the interventional group 42% have Rs.1500-3000. In control group only 23% of the children's family income was above Rs.5000. Elke JB. (2006) explained that orphans at high risk of leaving the family are due to lack of access to resources and essential social services, in particular schooling20.

With the respect to the reason for placement in the Residential Centers, in Interventional group 23% had lost their mother, 25% children have lost their father, 7% children have lost both their parents, 38% children were staying in the orphanage due to poverty and 7% children reside in orphanage due to parental separation. In the control group 18% of children have lost their mother, 18% children have lost their father, 18% had lost both parents, 33% were admitted due to poverty and 13% due to parental separation. Similar study findings were noted, Helal and Houaida. (2018), reported that over half (54.7%) of the children were admitted to the institution because their parentage was unknown, and the remaining 13.5%, 13.1%, and 9.8% were placed because their parents separated or were unable to support them financially. Additionally, 1.4% of the children were placed as their imprisoned.13. Manal Al. Q. (2021) reported that all the children who have lost their parents were admitted in institution14. Elke JB. (2006) reported that some children leave their relatives or family members and got admitted in Residential Centers due to various high-risk factors such as maternal orphans, children who experienced early parent loss, orphans from households with few adult relatives, orphans without access to basic social services, such as education, and children who experience abuse, violence, or discrimination from their family members 20.

With respect to the duration of stay, in Interventional group one third 33% children were staying for 1-2 years and 38% for more than 5 years, 22% children found to be staying for 3-5 years and 7% children were staying for less than one year, and in control group 22% children were staying 1-2 years, 38% children were staying for 3-5 years and one fourth 25% children were staying in the Residential Centers beyond 5 years. In a supporting study, Helal, Houaida. (2018), stated that with a mean year of 8.56, nearly half of the children (47.2%) lived in the institution for a period of 10–17 years, nearly a quarter (23.8%) for a period of 5–10 years, and 27.1% and 1.9% for periods of 1–5 years and less than a year, respectively.13. Zohra S, et al. (2011) reported that after five years in the institution, the prevalence of behavioral issues were 33% overall; the child's gender and the type of facility had a significant interaction. Malnourishment and shorter duration of stay in the facility were linked to conduct disorders in the child.21.

Regarding the background, the majority 67% and 77% in Interventional and control groups were from rural areas. In contrast to the findings, Helal and Houaida. (2018), revealed that 36% of the children were in rural areas and nearly two thirds (64%) of the children resided in institutions in urban areas. 10. Thielman N, et al. (2012) identified that most of the orphaned and abandoned children had poor health, they were female gender, poorer child health outcomes were linked to experiences of potentially stressful events, such as parent bereavement, living in an urban area, and limited caregiver participation22.

Regarding the educational status of the child, more than half (58%) in Interventional group were studying upper primary and half (50%) of the children in control group were in high school level. Similar findings were reported by Helal and Houaida. (2018) nearly two fifths (39.7%) of the children were enrolled in preparatory school, 22.4% in secondary education, and over one third (37.9%) in primary education13. Manal AQ (2021) stated that more than half 59.3% of the children were in secondary and one third were studying middle school14. Khormehr M., et al (2020) stated that 48.57% in elementary school, 28.57% in Guidance school and 22.86% in High school16. Kudzai Emma CM (2017 identified that half of respondent 51% had primary education, 39% had secondary education and only 10% of the respondents had no education17. It seems that

assessing the quality of life and improving the QoL especially in the upper primary and high school level of their study is very essential.

Section B: Effectiveness of LSTP on Quality of life of children residing in Residential Centers.
Regarding the Mean pretest scores of overall Quality of life in the Interventional group was 92.1, and in control group was 86.7. In both the groups, the pretest scores of overall Quality of Life were found to be low. It was evident that Life skill training programme was required to improve the quality of life in children residing in Residential Centers. Helal and Houaida. (2018) reported that 25.7% of the children living in residential centers were not happy with their lives, with 8.9% being extremely unhappy and 4.2% being neutral13. A study by Manal AQ (2021) shown that a low quality of care given to orphans in social care facilities results in a lower psychological quality of life14. Kalagi SH, Sajjan SB, and Natekar DS. (2020) found that roughly one-third (33.33%) of the orphan children had a poor quality of life, while the majority (66.66%) had a moderate quality of life15. In contrast to the study findings, Karalam SRB and Joseph MV. (2009) reported that there was no difference between the subjective well-being of kids living with families and those living in residential centers23.

In the Mean posttest scores of overall Quality of life, in the interventional group was 98.9 and in control group was 84.1. Thus, it was inferred that in overall quality of life, the children have shown statistically significant difference of quality of life in both the groups. This suggests that, in comparison to the control group, the children in the experiment group had a noticeably higher quality of life.

Domain wise comparison of Mean Pretest and Posttest scores of quality of life in Interventional and control group revealed that in Interventional group, the overall perception of quality of life was 3.7 and 4.0, regarding the overall perception of health, it was 3.7 and 4.0, In the control group, the overall perception of quality of life was 3.3 and 3.2, the overall perception of health was 3.0 and 3.2, with respect to Physical health domain in Interventional group, it was 23.3 and 24.6, and in the control group, it was 22.4 and 21.3, regarding Psychological domain, in Interventional group it was 21.0 and 21.6, in the control group, it was 18.7 and 18.5 respectively. In Interventional group the Mean score in social relationship was found to be 10.9 and 11, in the control group, it was 10.2 and 9.9 and in the Environment domain, in the Interventional group it was 28.2 and 31.1 in the control group it was 27.3 and 26.1 respectively. All the domains were found to significant at $p < 0.001$. Similar finding was reported by Kalagi SH, Sajjan SB, Natekar DS. (2020) that the highest Mean percentage of orphan children (57.43%) was found, for the physical domain with a Mean of 17.23, followed by the environmental domain (57.1%) with a Mean 17.13, social domain (25.66%) with a Mean 7.7, overall domain (13.22%) with a Mean 3.96, psychological domain (13.76%) with a Mean of 2.72 respectively15. Khormehr M., et al (2020) identified Mean score in Physical health was 17.51, Emotions 22.8, for Family & Leisure was 12.71; regarding Friends the score was 13.68 and regarding the school and learning 14.08 respectively16. In another study Kudzai Emma CM (2017) revealed that some participants reported experiencing psychological distress, such as depression and anxiety, the majority of participants received favorable scores in the psychological domain. A small number of individuals said that their everyday performance is impacted by bodily pain in the physical realm. Despite the fact that most participants were content with their social relationship, they were not happy with the help they got from others. In the environmental domain, few of the participants have dissatisfaction with their living environment. Overall, many participants were dissatisfied with their life17. Helal and Houaida. (2018), reported that less than one-third (30.3%) of them reported having fair physical wellness, while 3.8% reported having poor physical wellbeing and two fifths (39.9%) of them reported having fair emotional well-being, while 2.9% reported having poor emotional well-being and 5.6% of them had a bad relationship with their friend, while 7.9% had a bad relationship with their caregivers. In terms of schooling, slightly over half (52.3%) of the children had fair school functioning, while 22.4% had poor school functioning. 13.

Regarding the Mean of Pre scores of QoL in Interventional group it was 92.1 and in control group 86.7. The Mean of Posttest scores of QoL in Interventional group was 98.9 and in control group 84.1. Thus, it was inferred that scores of QoL have shown statistically significant difference in quality of life between the two groups. This implies that there was a significant increase in quality of life in Interventional group subjects when compared to the pretest scores. Similar findings were reported by the following studies. Tahereh MH, Shahram M, and Mohammad H. (2011) reported that the happiness, emotion control, and quality of life scores, as well as the subscales measuring physical circumstances, social relationships, and psychological health, all revealed a substantial impact from life skills training. However, there was no discernible variation in the subscale measuring physical health. In another study by Mohammad S, Hojjatollah F, Fariba F. (2012) reported that the life skills training for the students significantly improved their general health, they had reduction in physical

symptoms, low level of depression and anxiety following the intervention. It also found that there was improvement in social functioning among the students who had attended the training12.

In the current study it was found that between group comparison for all the domain wise QoL and Quality of life there was a significant difference ($p<0.001$) at all the five levels of assessment (pre, and posttests 1, 2, 3, 4) in Interventional group. This implies the following. Firstly, the children in Interventional group gained higher quality of life than those in control group and secondly there was adequate retention of knowledge about life skills among the children in Interventional group during all follow up assessment in comparison with control group. It can be inferred based on these findings that the children in the Interventional group had higher quality of life at Posttest and in all follow up assessments than those children in the control group. Within group analysis showed that the findings were significantly varied in the five levels of assessments on QoL and in its domains such as Physical health, and Environmental among the children in Interventional group than in control group. Children in the Interventional group possess higher quality life and better physical health and adapt well to their environment.

The finding of the study revealed that there was no statistically significant relationship with the demographic characteristics such as child's age, gender, religion, type of family, monthly family income, reason for placement, duration of stay, background, and child's educational status, which indicates that the demographic characteristics does not influence the child QoL staying at Residential Centers. In contrast to the finding the study by Helal, Houaida. (2018) reported a statistically significant relation between children's educational status, place of institution residence and duration of institutionalization with their life satisfaction13 and Manal AQ (2021) reported statistically significant correlation between the services provided to the orphans at social care homes and their QoL14.

Conclusion:

Children residing in Residential Centers undergo various physical, emotional, relationship and academic problems that affect the children's developmental process preventing them from achieving a sense of well-being. Mental health and well-being can be promoted among these children by conducting life skills training. This study revealed that, the quality of life of the children in interventional group was significantly improved from the baseline to four follow up assessments. It was concluded that implementation of life skills training programme and if the children practice it regularly in due course of time the children can attain sense of well-being.

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